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Administrator and Teacher Perceptions of the Inclusion of Students with Learning Disabilities in Regular Education Classrooms in Nebraska

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ADMINISTRATOR AND TEACHER PERCEPTIONS OF THE INCLUSION OF STUDENTS WITH LEARNING DISABILITIES IN REGULAR EDUCATION CLASSROOMS IN NEBRASKA

by

Linda S. Wanzenried

A DISSERTATION

Presented to the Faculty of

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For the Degree of Doctor of Education

Major: Educational Administration

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DISSERTATION TITLE

Administrator and Teacher Perceptions of the Inclusion of Students with Learning Disabilities in Regular Education Classroo in Nebraska

BY

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ADMINISTRATOR AND TEACHER PERCEPTIONS OF THE INCLUSION OF STUDENTS WITH LEARNING DISABILITIES IN REGULAR EDUCATION CLASSROOMS IN NEBRASKA

Linda S. Wanzenried, Ed.D

University of Nebraska, 1998

Advisor: Dr. Daniel U. Levine

This study investigates the perceptions of principals, and regular and special education teachers working in public elementary schools in Nebraska relative to the inclusion of students with learning disabilities in regular education classrooms. An Inclusion Perceptions Survey, developed for this research, was mailed to 50 principals, 75 special educators, and 546 regular educators, a randomly selected sample representing approximately 5% of the Nebraska populations of these professional groups. The overall response rate was 47%, yielding 318 surveys for analysis.

Results demonstrated statistically significant differences in the perceptions of principals and regular educators and of special educators and regular educators with regard to the effectiveness of and supports for current inclusive practices, and, to a lesser degree, for ideal practices. Principals and special educators tended to be more positive about both the effectiveness of inclusion and the supports and resources provided to the regular teacher with learning disabled students included in his/her classroom. There were also statistically significant differences in the

perceptions of respondents from rural vs. urban settings, those with dual or special education vs. regular education endorsements, and those with over 20 years of teaching experience vs. those with less than 8 years.

The 70 survey items were subjected to factor analyses which yielded two factors for variables dealing with current inclusion practices and two for variables dealing with ideal practices. Multiple analysis of variance procedures demonstrated that the signficant differences in subpopulations of demographic variables which emerged for survey items were also present for factors. Differences by assignment followed a pattern of correlations with factors similar to its pattern for survey items.

Recommendations for cultivating more harmonious perceptions of inclusion among principals, and regular and special educators include the establishment of participatory decision-making, ongoing staff development, and a system of accountability for outcomes for students with learning disabilities.

DEDICATION

This dissertation is dedicated to the memory of my daughter, Liesl Wanzenried, who did not live to witness the completion of my doctoral program, but whose spirit continues to be my inspiration and guide.

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Chapter I

Inclusion Movement

Over the last ten years, the benefits of educating students with disabilities in the regular education classroom with their typical peers have been debated in professional journals, the courts, teacher workrooms, and school board meetings across the nation. A prime stimulus for this debate was a 1986 "white paper" by Madeleine Will, then Assistant Secretary in the federal Office of Special Education and Rehabilitative Services. Will challenged local school districts to develop programs to educate children with learning problems in the regular classroom setting. Research demonstrating the efficacy of instructional practices for special learners with mild disabilities within the general education environment was encouraged (Will, 1986).

Central to this government initiative, and other calls for reform of special education, was the recognition that many learning difficulties experienced by students were artifacts of school organization and the instruction provided (Ainscow, 1994; Montgomery, 1989; Pugach & Warger, 1993; Will, 1986). Claiming that uniform standards for achievement and uniform instructional methods necessarily handicap some learners, critics of special education tracking practices called for an end to the inappropriate segregation of students who fall behind academically (Sigmon, 1990).

Proponents of this regular education initiative averred that there is insufficient evidence to support the implementation of special instruction or strategies for

students with disabilities (Pugach & Warger, 1993; Stainback, Stainback & Forest, 1989; Will, 1986). These detractors concluded that special education should be eliminated or so well merged with regular education that the extant dual system would no longer exist (Council for Exceptional Children, 1993; Slavin, 1990; Stainback, Stainback & Forest, 1989).

Such challenges stimulated both discussion and research, but little observable change in the delivery of educational services to special learners until recently. As of 1994, only 34 percent of students with disabilities were receiving the majority of their instruction in the regular classroom ("National Survey," 1994). This figure had remained essentially unchanged since the passage of the Education of the Handicapped Act in 1975 ("Feds to Push," 1994). However, the national movement toward increased inclusion being led by government agencies and professional organizations (Arnold & Dodge, 1994; "Feds to Push," 1994; "National Survey," 1994; Special Education Accountability Commission, 1994) witnessed success during the 1994-95 school year, when a record 43% of students with disabilities were educated in regular education classes and the number of those educated primarily in resource settings decreased by 30% (18th Annual Report/CEC, 1997).

In an investigation of the opinions of thirty-seven educational leaders on future directions in education for the decade of the 1990's and past the year 2000, Putnam, Spiegel,

and Bruininks (1995) predicted: (a) that there will be a movement toward increased inclusion, (b) the prevailing belief will be that people with disabilities have rights to participate in inclusive environments, (c) that students with mild disabilities will be educated in the general classroom, and (d) that researchers will focus on matching instructional needs with learner characteristics. Even though this study's sample was a small one, the conclusions of the authors were consistent with current opinions expressed in local, regional, and national workshops.

Background

Complicating these efforts to restructure special education are the rapidly increasing numbers of students identified as learning disabled. The 1992 Report to Congress on the Implementation of the Individuals with Disabilities Education Act reported that 50% of the nation's special education students were categorized as having specific learning disabilities (National Association of State Boards of Education, 1992). Specific learning disability is the fastest growing category of special education. From state to state, however, there appears to be no uniform definition of or criteria for this disability category, an inconsistency that results in large discrepancies in the numbers of students labeled "learning disabled." Investigators at the University of Minnesota have estimated that, under one or more of the current systems of classification across the nation, approximately 80% of the population could meet the

criteria for a specific learning disability (NASBE, 1992).

Many researchers believe the inclusion of students with mild disabilities in a general education classroom places additional demands on the teacher in the traditional, one teacher to one large group, classroom. Research evidence demonstrates that students with learning disabilities require more time on task, immediate feedback and reinforcement, guided practice, and more frequent assessment of progress in order to determine the need for adjustment of instruction (Choate, 1993; Fuchs & Fuchs, 1995; Pugach & Warger, 1993; Slavin & Madden, 1989; Wiig & Semel, 1980).

Proponents of inclusion maintain that general educators can accommodate their students and the needs of special students within the regular classroom, given the resources assigned to special education. Advocates of inclusion have produced descriptive data which detail the positive effects of inclusion on students' social acceptance--improved self esteem, positive peer nominations, and a sense of group belonging (Banerji & Dailey, 1995; Sale & Carey, 1995). These authors report some evidence of the effects of inclusion on academic outcomes. Most of their data on academic gains, however, deal with students in all special education disability categories. When the data are disaggregated and the results for students with learning disabilities isolated for analysis, the claims of the success of the inclusion movement are questionable.

For example, meta-analysis of 50 studies of special

education classes before 1980, conducted by Carlberg and Kavale (1980), demonstrated that special classes were significantly superior for students with learning disabilities, with a small, but positive effect size (ES = .29) for academic outcomes. Two critics of special education (Madden and Slavin, 1983), reviewed the same studies and arrived at a different conclusion--that the research supported placement in the regular classroom for students with disabilities, with the caveat of supplemental instruction in an effective resource program.

Despite the lack of any sizable body of evidence or agreement that the inclusion of students with learning disabilities results in improved academic outcomes, state and national agencies and professional organizations continue to exert pressure on educators to operate inclusive schools. In a report by the National Association of State Boards of Education ("Winners All," 1992) they recommended the creation of inclusive schools in which principals assume responsibility for outcomes for all students. By 1992, the state education agencies of Vermont, New Mexico, Colorado, and Iowa had expressed commitment to inclusive special education delivery systems (NASBE). Moreover, in a similar move, the Nebraska Department of Education published a reference document for educators and parents, Neighborhood Schools and Inclusive Education Practices (Special Education Advisory Council, 1994). The Special Education Accountability Commission, a panel created by the Nebraska Unicameral in

1993 to study cost containment of special education programs, concluded that integration of special and regular education was a worthy goal. In spring 1994, the Nebraska Association of Special Education Supervisors published A Vision for the Future of Special Education Services in Nebraska, a concept paper advocating the unification of regular and special education, based, at least in part, on the supervisors' assumptions that separate specialized instruction has failed to produce significant benefits for its students. Implicit in all these calls for the education of special students in regular classrooms is the stated belief that all teachers should be able to teach all children.

During the past few years, discussions on the inclusion of students with disabilities in regular education classrooms have focused on benefits that inclusion advocates claimed would ensue, such as social integration of the disabled with their peers, financial savings, and normalization. The impact of inclusive practices on the professionals involved has not been fully examined. Research has been conducted on attitudes toward special education and the inclusion process. Perceptions of the regular and special educators and building principals, whose responsibility it is to educate all learners and implement inclusion, however, have not been surveyed with regard to the practices in their schools and their views of ideal practices. How does this cohort perceive the inclusion of students with learning disabilities in the regular education classroom? What do they think about the

inclusive practices in their buildings? What do they perceive to be the ideal--how should inclusion work?

Purpose of the Study

The inclusion of students with learning disabilities in the regular education classroom is thought to create additional responsibilities and concerns for regular and special education teachers, and building principals. Their perceptions of inclusion, as it is implemented in their schools, and as it should be--the ideal, have not been systematically investigated.

The purpose of this study was to determine the perceptions of regular and special education teachers and building administrators regarding the inclusion of students with learning disabilities in regular classrooms, comparing current and ideal practices.

Importance of the Study

Given the current trend toward increasing inclusion, it seems that schools undertaking inclusion would want to identify factors that contribute to its success. Where inclusion of disabled students fails, there is evidence of inadequate preparation, training, and support (Friend and Cook, 1993; Uhing, 1994). Analysis of educators' perceptions of the challenges posed by inclusion practices will assist in identifying issues for staff development--both preservice training and inservice, and may be useful for school districts planning to implement inclusion. Educators' concepts, attitudes, and skills with regard to inclusion--

making classroom modifications and accommodations for students with learning disabilities, gains experienced by disabled students in the general education classroom, staff participation in the student placement process, and collaborative consultation and co-teaching--are important predictors of the success of the restructuring effort (Friend & Cook, 1993; Janney, Snell, Beers, & Raynes, 1995; NASBE, 1992; McLaughlin & Warren, 1994).

It is believed that a cooperative effort among the principal, special education teacher and regular education teacher is necessary for either general or special instruction to succeed. In order to pursue a common goal of inclusion, it will be necessary for the stake holders to agree on current practices and future goals. To help in understanding the importance and role of congruent goals in inclusive practices, the study will address the following questions:

Do regular education teachers, special education teachers, and principals differ in their perceptions of the current practices of inclusion of students with learning disabilities in the regular education classroom?

Do regular and special education teachers and principals differ in their perceptions of the ideal practices of inclusion of students with learning disabilities in the regular education classroom?

Do regular and special educators and principals' perceptions of current inclusion practices in their buildings

differ from their conceptions of ideal inclusion practices?

Do respondents' professional experience, sex, age, district and building size and setting, or degree predict perceptions of current inclusion practices?

Do respondents' professional experience, sex, age, district and building size and setting, or degree predict perceptions of ideal inclusion practices?

Limitations of the Study

The study was limited to educators in public elementary schools in the state of Nebraska. Both the response rate of the survey participants and their interpretations of the survey items are limiting conditions of the study.

Definitions of Terms

For the purposes of this study, inclusion is defined as the provision of educational services for students with disabilities in schools with non-disabled peers, in age-appropriate general education classes under the direct supervision of general education teachers, with special education support and assistance determined through the Individualized Education Program planning process (Special Education Accountability Commission, 1994).

In Title 92 Nebraska Administrative Code, Chapter 51, (1996) learning disability is defined as a "significant discrepancy between ability and achievement in understanding or using language--reading, writing, listening, speaking, thinking, and reasoning--and/or performing math calculations and mathematical reasoning."

> Nebraska State Department of Education definition: (1) The student fails to achieve commensurate with her/her age and ability when provided with appropriate educational experience; and (2) The student demonstrates a severe discrepancy between achievement and intellectual ability in one or more of the basic processes involved in understanding or using language, spoken or written, manifested in problems in listening, thinking, speaking, reading, writing, spelling, and/or doing mathematical calculations.

Regular education refers to the classroom setting(s) in which the typical, non-disabled student is placed for instruction. The term is used interchangeably with general education.

Organization of the Remainder of the Study

Chapter 2 will present a review of literature related to the effectiveness of regular classroom instruction of students with learning disabilities, necessary supports and training for educational staff, and administrator and teacher perceptions of these issues.

A discussion of the research methods and procedures for data collection and analysis will be found in Chapter 3. Chapter 4 will cover the presentation and analysis of the data, followed by Chapter 5 which will include study summary, conclusions, and recommendations.

Chapter II

Review of Related Literature

This review examines the literature related to students with learning disabilities, the Regular Education Initiative, mainstreaming, and inclusion. The most frequently analyzed issues address the effectiveness of instruction within the regular classroom, accommodations and modifications and concomitant student outcomes, training of educational staff, support provided to the regular educator teaching special needs students, and teacher and administrator perceptions of inclusive practices.

Effectiveness of Regular Classroom Instruction

Regular education initiative proponents claim that the student with a learning disability can achieve more in the regular classroom because of the rigor and richness of the curriculum (Pugach & Warger, 1993; Reynolds, Wang, & Walberg, 1987; Sapon-Shevin, 1996). They assert that the needs of the individual learner can be met with appropriate accommodations, modifications, and support (Cohen & Lynch, 1996; Madden & Slavin, 1983; Meese, 1992; Whittaker, 1996).

Accommodations and modifications and concomitant student outcomes. Will, and the Office of Special Education and Rehabilitative Services team who worked on the position paper (1986), acknowledged the need for the introduction of new instructional approaches into the regular classroom in order to meet the needs of students with mild disabilities. Other researchers, however, disagreed. In a longitudinal study

which presented a profile of teacher competencies necessary for the education of mainstreamed special education students, Larivee (1986) demonstrated that the instructional strategies which were effective with mainstreamed students were equally successful with regular education students. Larivee stated that effective instruction for special needs students was simply an extension of that emerging from the effective teaching research.

Instructional and curricular requirements for including students with learning disabilities in regular classrooms were discussed by Simmons, Fuchs, and Fuchs (1991). The researchers concluded that fundamental alteration of mainstream instruction is necessary in order for teachers to provide more support for needier students. The increased demands on the teacher, who works under time and logistical constraints, result in compromised instruction which is not supportive of optimal academic achievement for the learning disabled students.

Zigmond and Baker (1990) described the results of a year long examination of the progress of 13 students with learning disabilities in regular education classrooms in a project called Mainstream Experiences for Learning Disabled (MELD) students. The authors' observations revealed that the learning disabled students participating in MELD spent as much time on reading and math tasks as they had in special education, were assigned more text-related work than their peers, and spent significantly more of their reading time in

teacher-directed tasks. With these accommodations, the students with learning disabilities failed to demonstrate significant progress in either reading or math and achieved lower grades than they had previously in special education settings.

Houck and Rogers (1994) surveyed 788 educators in Virginia, including special and regular education directors and supervisors, building principals, and elementary and secondary special and regular educators. The results indicated that, despite active efforts to increase the amount of time students with learning disabilities spent in regular education, only limited changes had been undertaken within regular classrooms to accommodate the special learners. Survey results questioned the adequacy of regular educators' competencies to make the necessary adaptations.

Although Houck and Rogers (1994) determined that most of those surveyed believed that research had proved regular education settings accomplished equal or superior outcomes for learning disabled students, over half of the regular educators disagreed or tended to disagree that they needed to make adaptations in the classroom for students with learning disabilities.

Much of the impetus behind the Regular Education Initiative (REI) has been related to claims of the failure of special education to achieve desirable outcomes for its students with mild disabilities. In a review of research on the efficacy of special education practices, Hallahan,

Keller, McKinney, Lloyd, & Bryan (1988) determined that the evidence to date was inconclusive. These researchers criticized the emphasis of extant research on the placement or setting of instruction and suggested instead that research focus on the facilitative or inhibitive effects of classroom settings on instructional techniques found to be relatively effective--direct instruction, cognitive training, peer tutoring, and cooperative learning.

In the same article, Hallahan, et al (1988) evaluated the research on the educational prototype most frequently promoted by REI advocates, the Adaptive Learning Environments Model (ALEM), a program developed by Wang and Birch (1984). Hallahan's conclusion was that the limited number of ALEM studies contained a variety of problems in design, methodology, and validity which suggested that the study results should be questioned.

The authors of two relatively early meta-analytic studies comparing the efficacy of two learning settings--special versus regular education classrooms, each targeting different components of the efficacy literature--concluded that, for students with learning disabilities, special classroom placement was appropriate (Carlberg & Kavale, 1980; Wang & Baker, 1985-86). A number of researchers have identified the nature of instruction or practices within the setting as the critical factor in improving the academic performance or self-perception of students with learning disabilities who are educated in regular classrooms (Banerji

& Dailey, 1995; Bear, Juvonen, & McInerney, 1993; Rizio, 1994; Schulte, Osborne, & McKinney, 1990; Summey, 1995; Whinnery, King, Evans, & Gable, 1995). Cooperative learning and its concomitant peer tutoring component have been widely promoted as effective strategies for all students (Lloyd, Crowley, Kohler, & Strain, 1988; Stevens & Slavin, 1995). The latter researchers determined that cooperative learning, when combined with effective instruction, improves the performance of students with learning disabilities on standardized achievement tests.

For the purpose of investigating and validating essential teaching practices for educating students with mild disabilities in regular classrooms, Cannon, Idol, and West (1992) conducted a Delphi procedure with an interdisciplinary panel of 105 experts--researchers and practitioners from 35 states. The results validated 96 essential instructional practices, 82% of which were viewed as necessary skills for both regular and special educators.

This study found significant differences among panel ratings for regular and special educators. Cannon, et al. (1992) concluded that differences in the ratings assigned by panel members reflect the differing perspectives of regular and special educators. For all but 2 of the 36 statements on which regular and special educators disagreed, the average ratings were higher for special educators, indicating that panelists viewed these practices as more important for special than regular educators. Additionally, group mean

ratings were significantly higher for special than regular educators for a number of subcategories of teaching practices: assessment/diagnosis, instructional content, instructional practices, and monitoring/evaluation procedures.

It should be noted that, for the category, planning and managing the teaching and learning environment, only 19% of the statements were rated significantly different for regular and special educators. Cannon, et al. (1992) interpreted this consonance to reflect a sense of shared responsibility between regular and special education for collaborating to plan and manage the environment for included students with disabilities. In general, the results of the research indicated that teaching practices, such as individualization--adaptations or modifications of curriculum--which required relatively specialized training, were viewed as more essential for special than regular educators.

A seminal study which reviewed the research base for the years 1980 through 1995, described and analyzed the literature on identified inclusive practices which benefit most students in regular education classrooms (Fisher, Schumaker, & Deshler, 1995). In order to be considered for this review, the study: (a) had to have been conducted in a regular education classroom which included students with disabilities, (b) had to detail empirical data on the academic performance of the students with mild disabilities, and (c) had to utilize an experimental model which controlled

for ambient variables. The results demonstrated that, of 29 studies, 14 different practices met the criteria for validation as effective--improving the academic achievement of students both with and without disabilities. Fisher, et al. cautioned that, because the samples of students with mild disabilities were not necessarily randomly selected for inclusion in the regular classrooms in the reviewed studies, the samples may not be representative of the larger population.

Fisher, et al. (1995) validated the following six categories of practices as having merit in the education of students with mild disabilities in regular classrooms: peer tutoring, cooperative learning programs, teaching devices--graphic organizers and study guides, content enhancement, curriculum revision, and strategies instruction.

In judging the value of the promising inclusive practices, Fisher, et al. (1995) noted important limitations. For example, some of the strategies failed to produce socially significant (defined as passing grades) results for all students. Several inclusive practices were not sufficiently powerful by themselves without supplemental intervention which was required before improved academic outcomes were achieved. In addition, an important issue given considerable weight by Fisher and his associates is the fit between the realities of daily teaching demands and requirements of the inclusive practices. How likely, they ask, are teachers to implement even the most effective

practice if it consumes an unrealistic amount of time, energy, or effort? The researchers concluded that, although several powerful and practical inclusive practices have been identified, these practices have significant constraints. Furthermore, researchers identified the need for the development of more validated practices if students with mild disabilities are to be educated completely within the regular classroom.

The inclusion of students with learning disabilities in regular classrooms requires that teachers make major changes in mainstream instruction and curricula (Houck & Rogers, 1994; Sapon-Shevin, 1996; Simmons, et al., 1991; Villa, Thousand, & Chapple, 1996; Zigmond & Baker, 1990). Necessary components of effective instruction include increased opportunities for feedback, reinforcement, and guided practice. Despite the knowledge base that students with learning disabilities require more intensive, individualized instruction, however, there is little evidence of this observed in inclusive classrooms (Baker & Zigmond, 1995; Simmons, et al., 1991).

Baker and Zigmond (1995) summarized the results of their structured observations of five school sites in five different states. Although the implementation plans varied--some schools asked for volunteer staff participation; some schools clustered the learning disabled students within classrooms; regular and special education teachers consulted, peers tutored, school days were extended--in each site, the

special educator assumed the role of consultant to regular educators in addition to providing direct services to learning disabled students.

In their review of the special education provided to the learning disabled students in these five states, Baker and Zigmond (1995) concluded that individual adaptations were rare. Although the students with learning disabilities were provided modified assignments, curricular materials, and assessments, most often the accommodations were used with all of the students. Little specially designed instruction was provided to students with learning disabilities. Paraeducators, peers, and even parents--individuals with the weakest knowledge base in pedagogy--were assigned primary responsibility for supporting the learning disabled student in the regular classroom.

Furthermore, Zigmond (1995) concluded that, while the students observed were receiving a good general education, they were not receiving a <u>special</u> education. Inclusion advocates' claims that, when provided with appropriate supports and accommodations within the regular classroom, students with learning disabilities could realize improved outcomes over the traditional special education classroom, were not fully examined because special instruction was not provided.

To examine how the needs of students with specific learning disabilities could be met in the regular classroom setting, with the provision of specialized instruction within

that setting, research projects conducted by three universities were established in six different schools. Analysis of the aggregated data from these three multi-year studies led to the conclusion that, even when provided with enhanced educational opportunities in the regular classroom, a significant number of students with learning disabilities failed to achieve targeted outcomes (Zigmond, Jenkins, Fuchs, Deno, Fuchs, Baker, Jenkins, & Couthino, 1995a). In a later interpretation of this study, (Zigmond, Jenkins, Fuchs, Deno, & Fuchs, 1995b) the authors explained that 54% of the students with disabilities had improved in relative standing after a full year of inclusion in the regular education classroom. The general education settings in these studies were restructured to provide learning opportunities at different academic levels, consistent monitoring of progress with concomitant modification of instruction based on the monitoring results, and attention to maximizing academic learning time.

The three research models were designed, implemented, and evaluated by the University of Pittsburgh, the University of Washington, and Vanderbilt University, in response to the challenge issued by Will (1986) to develop strategies for the delivery of special education services within regular classrooms.

Although the models were significantly different, they shared three common elements. Each targeted altering the conditions within regular classrooms that led to referrals of

students to special education, returning those students to the regular classroom, and effectively meeting their educational needs in that setting.

Each of the three models concentrated on the restructuring of regular education through implementation of instructional strategies and accommodations, most of which were validated procedures for special education. Some had only been used in general education. University resources, financial and professional, in combination with the special education staff at the six schools, provided significantly enhanced learning opportunities for students with learning disabilities.

The goal of the educational programs of the Universities of Pittsburgh and Washington was the elimination of the traditional, pull-out remedial and special education models. In these two institutions, special education was transformed from the outset of the study. The regular educator was supported in the use of effective instructional strategies, regrouping for instruction, and in reducing content coverage so that the objectives of the curriculum were reordered or eliminated. In the Pittsburgh model, the students' reading progress was closely monitored using curriculum based assessment, and regular problem-solving meetings held to plan instructional changes for students whose progress was not satisfactory.

The University of Washington regular classroom paradigm employed a number of proven strategies for students with

learning disabilities--Cooperative Integrated Reading and Composition, peer tutoring, Active Mathematics, Skills for Success (an organizational and study skills framework), and in-class support from special educators and paraeducators.

The Vanderbilt project involved the use of a school-wide organizational/study skills curriculum implemented during reading instruction at the outset of the year and monitored for the remainder of the school year. In addition, in all academic studies, teachers utilized extensive class wide peer-tutoring, which was modified to address the individual learning needs of students. Curriculum-based assessment and problem-solving teams were used to monitor progress and modify instruction when indicated.

The achievement of the 145 students with learning disabilities in the three projects was analyzed with a focus on two areas--the magnitude of gains in reading, and the success in narrowing the achievement gap in reading between the learning disabled students and their typical peers. Analysis of the Basic Academic Skills Samples reading pre- and post-treatment scores revealed that 46% of the students' scores were essentially unchanged from fall to spring; 63% made less than average gains; 40% made gains less than half those of their peers; and 46% lost ground relative to their peers.

From the results analyzed by Zigmond and her colleagues (1995a), all of whom are respected scholars in the field of special education, it appears that special education

supplementary aids and services provided within the regular classroom are insufficient to accommodate the wide differences in ability levels and needs of all students with learning disabilities. A little over half of these identified learners realized significant gains.

The researchers provided further interpretation in their follow-up article in which they cautioned that the results of the more than 150 person-years of work on these three models should not be interpreted to mean that some students with learning disabilities will always require pull-out resource room instruction. Rather, Zigmond and colleagues (1995a) acknowledged that a different model of inclusive instruction might have achieved superior outcomes. Still, the results affirm the current need for a continuum of services in order to meet the learning needs of all students.

In contrast to the conclusions of Zigmond and colleagues, McLeskey and Waldron (1995) analyzed the results of the three major projects and declared the federally funded study a success. The latter professionals criticized the standards for effectiveness established by Zigmond et al. (1995a) as unreasonable. The expectation that students with learning disabilities will be able to improve their relative academic standings over their typical peers, averred McLeskey and Waldron, is unrealistic. Such an acceleration in learning rate would constitute a cure, which, these academicians cautioned, is not currently available.

McLeskey and Waldron (1995) recommended what they

believe to be a more reasonable standard for the student with a learning disability who is educated in the regular classroom--academic progress that is at least equal to that of students with learning disabilities educated in separate settings. In addition, they maintained that all students with specific learning disabilities should not be held to the same standard for success.

Support and resources for inclusion. An important feature of the REI is the emphasis on the provision of support for the student with a learning disability within the regular classroom.

In her April, 1994, testimony on special education reform and inclusion before the Subcommittee on Select Education and Civil Rights in the House of Representatives, Director of Education and Employment Issues, Linda Morra, summarized the results of restructuring efforts to that date and made recommendations for successful inclusion of learners with disabilities based on a series of observations of programs nationwide. Two of the four components identified as critical were: (a) a collaborative instructional environment and (b) appropriate levels of support--training and educational aides.

Collaboration. Throughout the literature on inclusion, there is recognition of the need for collaborative efforts of regular and special educators in order to promote successful inclusion (Ayres & Meyer, 1992; Bauwens, Hourcade, & Friend, 1989; Fritz & Miller, 1995; Kelly, 1992; Kisler, 1982;

Stainback & Stainback, 1992; Vaughn & Schumm, 1995; Voltz, Elliot, & Cobb, 1994; Wolery, Werts, Caldwell, Snyder & Lisowski, 1995). These efforts range from team planning for and design of special instruction to co-teaching, in which the regular and special educator assume different responsibilities for instruction within the regular classroom. Important to this collaboration is the utilization of educational assistants within the regular classroom to provide assistance to the special learner.

The addition of educational assistants to support students within regular classrooms is a fiscal concern for school districts. Morra (1994) reported that no systematic study of costs for inclusion programs compared with those of traditional special education classrooms was available at that time. Moreover, administrators, she concluded, had conflicting views on expenditures for inclusion; some declared it more expensive, some less expensive, and many thought there was no difference.

Teacher training. Another essential component of successful inclusion is teacher training. A survey of 164 experienced elementary teachers in Pennsylvania, conducted to determine their perception of the supports needed and available for effective inclusion, concluded that there was a perceived need for both training and support services (Wolery, et al., 1995). This study revealed a difference in the perceptions of special and regular educators, with the former reporting greater availability of resources than the

latter. In general, however, even when data were analyzed by teacher type--special or regular educator, self-rated as successful or unsuccessful in inclusion efforts, and grade level, the teachers thought they needed more resources and supports than were available to them. The results indicated the strongest reported needs in the areas of personal support and training.

Ellis, Rountree & Larkin (1993) investigated master teachers' concepts of the competencies necessary for novice regular and special education teachers in terms of formal and informal knowledge bases relevant to the inclusion of students with mild disabilities in regular classrooms. The study identified 14 essential competencies in collaboration/consultation, many of which were similar to those discussed in earlier analyses (Cannon, et al., 1992; West & Cannon, 1988). Experienced teachers demonstrated their awareness of the minimal differences between regular and special educators in terms of the competencies necessary for effective inclusion of disabled students. Ellis, et al., 1993, concluded that the preponderance of formal knowledge-based competencies--those identified in published research and by professional organizations--regarded as necessary has implications for regular and special education teacher training, both pre- and in-service.

A limited exploration of variables which support the inclusion of students with disabilities in two Indiana schools revealed that teachers varied in their use of

accessible resources (Fritz & Miller, 1995). The results suggested that individual teacher's perceptions of the level of support from the building principal was a potent indicator of success in inclusion efforts.

Attitudes toward Inclusion

Teacher perceptions of inclusive practices. As the REI gained momentum, Coates (1989) designed a 15 item survey which measured 94 northwest Iowa, regular education teachers' agreement/disagreement with essential assumptions of the movement and perceptions of its proponents. For a large majority of the survey items, participant responses were in the direction of disagreement. None of the 15 items achieved a rating of agreement. The item which stated that, "provided further preparation and training, the regular education teacher would be able effectively to meet the educational needs of students served by special education," achieved a rating closer to undecided than disagreement. Surveyed teachers disagreed that, if they were trained in certain instructional competencies, they would be able to improve the achievement levels of all students, meeting the educational needs of those with disabilities as well as typical learners.

Additional items with which respondents disagreed included statements that: (a) the skills needed to educate both mildly handicapped and non handicapped students are the same; (b) provided additional consultative support,the teacher can meet the needs of mildly handicapped students; and (c) even with mildly disabled students included, the

regular class size could remain the same, if the teacher is given extra training and support.

Coates (1989) noted that the northwest Iowa teachers in the survey had access to extensive support in the form of special education and related services staff from their Area Education Agency. Even with this greater than national average support, however, survey respondents expressed strong disagreement, for a mean rating of 4.00, where the scale is 1 to 5, with the statement that resource rooms are not effective in meeting the educational needs of mildly disabled students.

An investigation of the opinions of 381 special and regular educators in California and Illinois, concerning the REI, yielded support for extant special education practices--pullout programs, in elementary schools (Semmel, Abernathy, Butera, & Lesar, 1991). Although the school sites were not randomly selected, the entire certified staff at each of 22 public schools was surveyed, with a mean return rate of 85.6%. Reported results were drawn from only the regular and special education teachers in the sample.

The study identified 14 factors consistent with the research hypotheses, the following 9 of which are relevant to the subject of this literature review: the special education teacher's role, adapting instruction to meet the needs of students with mild disabilities, teacher training, shared responsibility, collaborative teaching, general instructional and collaboration skills, instructional time, achievement

outcomes, and effectiveness of collaborative consultation.

Semmel, et al. (1991) concluded there was no general dissatisfaction with the current special education delivery system. With regard to specific factors generated from the research, there were no statistically significant differences between Illinois and California teachers. A statistically significant difference between regular and special educators was verified for only two factors--teacher preparedness/training and instructional time. Special educators perceived their training and preparedness for teaching students with mild disabilities in regular classrooms as greater than regular educators. The special educators also perceived that time and effort spent on instruction of special students would not diminish time and effort spent on teaching other students in the classroom as much as regular educators believed they would.

Semmel, et al. also found regular education teachers' measured beliefs were that full regular classroom inclusion of students with mild disabilities would disproportionately deflect instructional time from typical learners. In addition, regular educators questioned their ability to adapt instruction to meet the needs of special education students.

Generally, agreement scores were low on those factors related to the competencies of regular educators in providing instruction to students with mild disabilities in regular classes, given their training, the sizes of their classes, and the amount of time available for instruction.

A relatively high level of agreement was verified for the shared responsibility factor, suggesting that respondents believed the regular educator has primary responsibility for the instruction of all students in the regular classroom. In addition, agreement on this factor indicates that the resource room program was not perceived as more effective than the regular classroom program.

Less than one-third of the teachers viewed the regular classroom with special education consultation as the most effective setting for the education of students with mild disabilities. Neither regular nor special educators anticipated improvement in academic outcomes for either typical or special students as a result of proposed REI reforms (Semmel at al., 1991).

The Coates (1989) and Semmel, et al. (1991) results suggest that the perceptions of the key service providers in the movement to include students with mild disabilities in regular classrooms are not congruent with the basic optimistic tenets underlying the inclusion initiative.

More recent investigations of the perceptions and attitudes of teachers and principals add to the knowledge base on this issue.

Siegel (1992) hypothesized that the negative teacher views of inclusion verified in earlier studies were related to the practitioners' general perception of mainstreaming, not to the individual students with disabilities within their own classrooms. Through direct classroom observations and a

survey, Siegel established that regular educators were not rejecting of the students whom they were successfully teaching.

The researcher speculated that the general attitude toward students with disabilities expressed by regular classroom teachers may be an artifact of the traditional special education service delivery model. Because many of their learning handicapped students are removed from the classroom for a majority of the school day, teachers have less interaction with and attachment to these learners.

The apparent support for resource room instruction uncovered in earlier research, Siegel (1992) inferred, results from regular educators' concerns about meeting their learner's special needs in the regular classroom. She concluded from her research that, given training in classroom management and effective instruction, teachers' attitudes about their ability to be successful educating students with disabilities would be more positive.

Principal attitudes toward inclusion. There have been few investigations of the attitudes of administrators toward inclusion. A study designed to explore the teacher and building administrator perceptions of the knowledge base and skills necessary for successful inclusion, found that both sets of educators perceive themselves to function exceptionally or acceptably with regard to inclusion (Landers, et al., 1995).

In a study of the attitudes of 230 randomly selected

elementary public school principals toward the education of students with disabilities in regular education classrooms, Bennett (1996) examined the following issues: amount of formal course work in special education, experience with disabled students, inservice training, and attitudes toward inclusion based on different categories of disability. The survey results verified a statistically significant relationship between the number of professional development training hours, regardless of the type of training, and principal attitudes toward inclusion. Administrators who had received minimal training tended to report more negative attitudes toward inclusion than those who had received more extensive training. Formal undergraduate or graduate training in special education was not significantly related to attitude toward inclusive practices.

There was no significant relationship between principals' prior experience with students with disabilities and their attitudes toward inclusion. The study demonstrated, however, that most of the respondents had substantial teaching and administrative experience with disabled learners, especially those with mild disabilities.

Data verified a significant relationship between principals' attitudes toward inclusion and different disability categories. As the severity of disability increased, the principals' attitudes toward inclusion became less positive. Students with learning disabilities were among those considered by the principals to have sufficiently mild

handicaps to allow them to benefit from education within the regular classroom.

Gameros (1994) conducted a three-part survey of 63 principals of effective schools in three public school districts to investigate their roles and attitudes relative to the education of students with disabilities. He determined that the principals believed their leadership and vision served to establish a positive school environment that: (a) welcomes diverse learners, (b) provides equally effective instruction for special and regular education students, (c) holds high achievement expectations for all students, (d) offers comparable special and regular education curricula, (e) educates students in heterogeneous classrooms, and (f) offers all students similar access to environments and opportunities.

The effective principals identified their support of their schools' placement decisions for students with disabilities as a critical factor in the success of inclusive efforts within their buildings.

With regard to the principals' attitudes toward full inclusion for students with different handicaps, Gameros (1994) demonstrated that the administrators perceived students from 7 of 12 disability categories would benefit. Students with mild learning disabilities were those with the highest mean within the agree range.

Summary

This review of literature reveals that experts in the field agree that regular education curriculum and pedagogy are insufficient to meet the academic needs of students with specific learning disabilities. A number of strategies, curricular modifications, and accommodations have been identified as effective with learning disabled students, but their implementation within the general education classroom has not accomplished uniformly positive results.

The most rigorous and comprehensive research designed to assess the effectiveness of inclusive instruction for learning disabled students, a collaborative effort between public schools and three universities, yielded evidence that a little over half of the learners made acceptable gains in reading. The supports and instructional strategies provided to the special needs students in this project were transformational, constituting a significant restructuring of the regular classroom. Depending upon their standards for success, professionals interpreted the results differently. The less than positive results obtained for almost half of the disabled learners argue for the advisability of maintaining a continuum of service delivery options, including the more restrictive pull-out or resource room instruction.

Analysis of the literature on teacher attitudes toward the REI and the education of students with disabilities in regular classrooms reveals that the practitioners, those

closest to the problem, do not universally regard the practice of inclusion as the solution to the challenge of improving outcomes for this population. Regular education teachers question their abilities to be successful in teaching students with disabilities and believe there is a need for more support and resources than are available.

Although regular and special educators tend to agree that the regular classroom teacher has primary responsibility for the instruction of students in the classroom, with the collaborative support of the specialist, they disagree on the impact of the inclusion of students with disabilities on the instruction within the classroom. A critical factor identified as an area of concern by the regular teachers is instructional time.

The relatively few studies of principals' attitudes toward inclusion demonstrate that the building-level administrators view themselves as instrumental in establishing an environment that supports the inclusion of students with disabilities in regular classrooms. This cohort has definite opinions about which disabled students are appropriately educated in the regular classroom. Students with specific learning disabilities are among those the principals identify as correctly included.

The issues most frequently specified in the literature as critical variables in the inclusion of students with disabilities in regular classrooms involve training, collaboration, and support. Yet there is little evidence that

service providers have any input into or impact upon the implementation of inclusive practices (Bradley & West, 1994; Semmel et al., 1991).

Chapter III

Methodology and Procedures

The purpose of the study was to examine the perceptions of principals, regular and special education teachers working in public elementary schools in Nebraska relative to the inclusion of students with learning disabilities in regular education classrooms.

This chapter describes the selection of the sample population, the data collection instrument, data collection and analysis procedures.

Identification and Selection of Population and Sample

The participants in this study were principals, regular education teachers, and special education teachers in public elementary schools across the state of Nebraska. A stratified, proportional random sample was conducted using the database provided by the Nebraska Department of Education Data Center. According to this agency, there were 10,914 regular education teachers, 1,496 special education teachers, and 1,003 principals employed in elementary schools in Nebraska during the 1995-96 school year. Through a random sampling procedure, 50 principals, 75 special educators, and 546 regular educators, or 5% of the total, were selected for receipt of the survey.

Data Collection Instrument

The questionnaire was developed by the researcher through several stages. Based on the investigator's public school special education experience and examination of the

literature, an initial draft of the survey was developed and submitted for review by fellow research students, and subsequently revised. The revised survey, with the addition of a cover letter explaining its purpose, was given to 18 educators in the Westside Community Schools in Omaha, Nebraska, whose willingness to participate in the pilot study had been obtained through contact by electronic mail, telephone, or in person. Fifteen of the surveys were completed and returned, with the following distribution: five elementary principals, four elementary teachers of grades first through fourth, three elementary special education teachers, and three middle school special education teachers. The pilot study participants provided feedback on the amount of time required to complete the survey; their suggestions for wording or concepts they would change, further define, add, and/or clarify; and general or specific suggestions for improvement of the questionnaire. Based on this feedback, the final survey draft was developed.

The Inclusion Perceptions Survey (Appendix H) consisted of three sections, printed on both sides of two sheets of legal size paper. The first section contained a cover letter and instructions for responding to the survey statements. The second section had 35 statements with which participants were instructed to indicate their agreement or disagreement on a five item, Likert-type scale. These statements addressed areas identified in the literature as significant issues in the inclusion of students with disabilities in regular

education classrooms. Each stimulus statement focused on one of six issues: academic or social gains, teacher training, accommodations, collaboration/support, teacher rewards, or influence.

The following are examples of items from the Inclusion Perceptions Survey (Appendix H):

- The educational needs of students with learning disabilities are met in regular classrooms.
- Regular education teachers with learning disabled students receive adequate support from special education staff.
- Special education teachers have specialized knowledge and skills they use in educating learning disabled students.
- Having regular and special educators team or co-teach the regular class meets the needs of all students in the regular education class.

For each statement, the participant was instructed to indicate the response which most closely reflected agreement or disagreement in terms of: (a) current status, the practices in the educator's school with regard to the inclusion of students with learning disabilities in regular education classes; and (b) the ideal, the educator's concept of the ideal educational setting, the practices and beliefs with regard to the inclusion of students with learning disabilities in regular education classes viewed as ideal. The third section addressed respondent's demographics, variables, such as age, years of teaching, endorsement areas, education/degree, experience teaching students with disabilities, and school setting.

Data Collection Procedures

The Inclusion Perceptions Survey (Appendix H) was mailed to the sample population of 671 in April, 1997, along with a self-addressed, metered envelope for the return of the completed instrument. Each survey was stamped with an identification number so that returns could be monitored.

Within three weeks of the mailing, 244, 36%, of the surveys had been returned. Using the identification numbers to track the returns, a follow-up postcard, with a reminder to complete and mail the survey, was dispatched to each respondent whose survey had not been received by three weeks after the mailing. The reminders yielded an additional 74 surveys, for a total of 318 completed surveys, or a 47% response rate. Nine of the returned surveys were judged so incomplete as to be useless and were deleted from the database. Of the remaining 309, 299 included information on their assignments, yielding the following response rates for each of the sample strata: 60% for principals; 58% for special educators; and 41% for regular educators.

The targeted ratio and the achieved ratio from the returns were: regular educators to principals, 10.8 targeted, 7.5 achieved; regular educators to special educators, 7.3 targeted, 5.1 achieved.

In order to determine the need to pursue the return of additional surveys, the file was split into pre-reminder and post-reminder data, and the means calculated for each of the demographic and experiential variables, as well as for the

total survey returns. The results are illustrated in Table 1 (Appendix A).

Examination of the means reveals that the variables of the respondents who submitted their surveys following receipt of the reminder card are not significantly different from those of the respondents who returned their surveys after the initial mailing. It may be concluded, then, that continued pursuit of additional returns would yield similar respondent profiles.

Means, standard deviations, and frequencies were calculated. The data were subjected to factor analysis to identify underlying constructs or factors that explain the correlations among a set of variables. Subsequent multiple oneway analysis of variance procedures were conducted to measure the effects of demographic variables on the factors.

Chapter IV

Results

The purpose of this study was to examine the perceptions of public school elementary professionals relative to current and ideal practices of the inclusion of students with learning disabilities in regular education classrooms. The questions posed were:

Do regular education teachers, special education teachers, and principals differ in their perceptions of the current practices of inclusion of students with learning disabilities in the regular education classroom?

Do regular and special education teachers and principals differ in their perceptions of the ideal practices of inclusion of students with learning disabilities in the regular education classroom?

Do regular and special educators and principals' perceptions of current inclusion practices in their buildings differ from their conceptions of ideal inclusion practices?

Do respondents' professional experience, sex, age, district and building size and setting, or degree predict perceptions of current inclusion practices?

Do respondents' professional experience, sex, age, district and building size and setting, or degree predict perceptions of ideal inclusion practices?

The results discussed in this chapter are based upon the responses to the survey described in Chapter 3 and displayed in Appendix H.

Respondent Demographics

Analysis of respondents' demographics, as illustrated in Table 2 (Appendix B), revealed a lack of racial diversity; only 7 of the 306 participants who completed the question on race indicated labels other than Caucasian. In addition, 84% of survey participants were female, an accurate reflection, it may be assumed, of the preponderance of female teachers in elementary schools across the state.

Regular education teachers constitute almost 76% of the survey respondents, with principals making up 10%, and special educators, 14.7%. The number of regular educators responding at each grade level ranged from a low of 3.7% for kindergarten teachers to a high of 10.7% for first grade teachers. Educators for grades 2 through 5 were relatively equally represented, with a higher number of "specials," physical education, art, music, etc. teachers, 9.4%, also included.

The question on experience with students with learning disabilities was answered "yes," by 97%--298 of 308 educators. Because of the consistency of the "yes" response on this item, no variance could be calculated; the responses to this item were not used in the analysis. Participants' experience with students with learning disabilities was overwhelmingly in regular education, although this pattern may reflect the larger numbers of regular education teachers in the sample. Almost half of the special educators responding reported experience teaching learning disabled

students in both regular and resource settings; only one of the special educators reported working with this population in regular education only.

Forty-six percent of the sample reported their highest educational degree as the bachelor's level, with another 49% claiming attainment of a masters degree or masters degree plus 30 hours. The remaining respondents reported achievement at the educational specialist, 3.9%, or doctoral, .7%, level.

Educators working in small towns constituted 44% of those responding. Suburban and urban educators were equally represented at 18.8%. Teachers in rural areas make up 13.2% and those in central city districts make up only 5%.

All but 30 of the respondents had experience teaching regular education, with an average of close to 15 years. Of the 76 teachers reporting experience in special education, the mean was greater than 8 1/2 years. A limited number of respondents, 33, indicated service as administrators, for an average of 13 years of experience in that capacity.

Survey respondents' input on their districts' enrollment was compared to the data from the survey tracking number. Results of the comparison indicated the existence of a number of errors in the estimations of the sizes of the larger districts. Because of the large number of errors on this question, this item was eliminated from the survey analysis.

The building numbers reported by respondents ranged from 8 to 900, with a mean of 321. For purposes of analysis, these variable numbers were divided into quartiles, with the lowest

quartile for student numbers 8 through 200, the second for 201 through 300, the third for 301 through 430, and the fourth for 431 through 900.

Respondents' estimates of the number of special education students in their buildings ranged from 1 through 300, with an average of 41. In order to assess the effects of special education student numbers, they were divided into quartiles: 1 through 18, 19 through 28, 29 through 48, and 50 through 300. This last figure, indicating 300 special education students within a building, is questionable, although school districts often cluster several special education programs within a single building.

Survey Responses

The questionnaire listed 35 statements with which respondents were to indicate their level of agreement or disagreement for both current practices within their buildings and the practices they perceived as ideal. Few statements achieved a mean rating that indicated decisive agreement (4 or greater) or disagreement (2 or less). The means for responses are displayed in Table 3 (Appendix C).

Perceptions of current practices which achieved average ratings of agree or strongly agree include: students with learning disabilities in regular education classes require extra time and attention from the regular education teacher, 4.35 (SD = .76), special education teachers have specialized knowledge and skills they use in educating learning disabled students, 4.11 (SD = 1.00), and the inclusion of learning

disabled students in regular education classes requires instructional and classroom management changes, 4.06 (SD = .85).

Ideal practice statements which elicited mean ratings of agree or strongly agree include weighting a student with a learning disability as more than a single student for purposes of determining class size, 4.02 (SD = 1.03); having regular education teachers participate in inservice training to prepare them for teaching learning disabled students, 4.35 (SD = .77); providing adequate support from special education staff to regular education teachers with learning disabled students, 4.48 (SD = .68); receiving regular checks by the principal on the need for support for the education of learning disabled students in regular classes, 4.20 (SD = .72); providing more resources and supports for the regular educator with learning disabled students, 4.21 (SD = .85); providing Student/Teacher Assistance Team support to regular educators making accommodations to meet the academic needs of learning disabled students in regular classes, 4.24 (SD = .72); and regular and special educators have regularly scheduled time within the school day to collaborate on the education of the learning disabled student, 4.39 (SD = 1.13).

Only two statements generated average ratings indicating disagree or strongly disagree: that regular educators who successfully teach learning disabled students receive recognition or compensation, 1.67 (SD = .80), and the item discussed below.

A single survey item stands out as having elicited relatively polarized responses when the average rating for perceptions of current practices is compared with the mean rating for the ideal. With reference to current practices, respondents expressed disagreement with the statement that regular and special educators have regular time within the school day to collaborate on the education of the learning disabled student, 1.92 (SD = 1.13); their most frequently selected response, the mode, was strongly disagree. In contrast, the average rating for this item, for ideal practices, was close to midway between agree and strongly agree, 4.39 (SD = .90).

Analysis of Variance

Oneway analyses of variance (ANOVA), using Tukey's honestly significant difference method (Norusis, 1990), were calculated to identify the presence of differences in respondents' ratings of their perceptions.

Results of the ANOVA for the independent variable, assignment, revealed significant differences (the term "significance" as used in this study always refers to statistical significance) in responses for 35 of the 70 statements. Fifteen, (41%) of these ratings reflected differences between both administrators and teachers and special educators and teachers. Table 4 (Appendix D) lists 17 items on which there were significant differences between the administrators and at least two of the three regular educator groups' ratings, as well as 12 items on which special

educators and at least two of the three regular educator groups significantly differed.

Different Perceptions of Current Practices

The many current practice items on which there were significant differences between the mean ratings for administrators and regular educators represent a disparity involving these respondents' views of the efficacy of and supports and resources for the inclusion of learning disabled students in regular classrooms. Such differences were observed for questions dealing with scheduled time for collaboration, improvement of academic achievement and graduation rates for LD students, inservice training for teachers, adverse or beneficial effects on typical classmates, support from special education staff, assistance team, and principal, need for extra time and attention, and influence in the placement of the learning disabled student in the regular class. In general, administrators viewed current inclusion practices as more effective and appropriate than did regular education teachers.

For example, administrators indicated significantly less disagreement, ($\underline{M}$ = 2.63), than did primary, ($\underline{M}$ = 1.67), intermediate, ($\underline{M}$ = 1.74), and specials teachers, ($\underline{M}$ = 1.96), with the statement that teachers have regular time for collaboration. With regard to academic achievement of learning disabled students improving in regular classrooms, administrators expressed significantly greater mean agreement, 3.87, than both specials, ($\underline{M}$ = 2.99), and primary

teachers, (M = 3.18). Special educators' perceptions (M = 3.61) were significantly more in agreement with the statement that there is sufficient time for collaboration, than those of specials teachers, (M = 2.99). Although all respondents disagreed that there is regularly scheduled time for collaboration between regular and special education teachers on the needs of learning disabled students, both principals and special educators significantly differed in the extent of their disagreement with at least one group of regular educators.

Further analysis also showed that regular and special educators were significantly more inclined to disagree with the assertion that inservice training prepared regular teachers for inclusion than were administrators. Intermediate teachers were close to disagreement, (M = 2.12), on this statement, significantly different from primary teachers, (M = 2.17), special educators, (M = 2.32), and specials, (M = 2.55). In contrast, the mean for principals, (M = 3.37), was between undecided and agree. None of the respondent groups agrees that regular teachers currently receive inservice training to prepare them to teach students with learning disabilities. Principals, however, expressing indecision on this item, were significantly less in disagreement than the other educators.

Another area of significant differences between administrators and regular teachers, and between special educators and regular teachers, is revealed in the mean

response values for the statement that regular teachers who successfully teach learning disabled students receive recognition or compensation. Regular teachers' mean scores ranged from 1.40 to 1.58, clearly expressing disagreement to strong disagreement with the statement. The average for principals' perceptions, while close to indicating disagreement, ($\underline{M}$ = 2.17), is significantly different. Special educators' mean value of 1.98 is also significantly different from those of all three groups of regular teachers. Both principals and special education teachers tended to disagree less strongly that regular teachers receive recognition for effectively teaching learning disabled students.

In response to the assertion that learning disabled students are being included in regular classrooms to reduce special education costs, there were significant differences among respondents. The largest disagreement was expressed by administrators, whose mean score of 1.90, was significantly lower than those of the three groups of regular educators, whose mean scores ranged from 3.05 to 3.25. The mean for special educators, 2.57, was significantly lower than that for primary teachers, 3.25. The principals unambiguously disagreed that inclusion is being promoted in order to save money while regular educators expressed uncertainty.

Both special educators and administrators registered scores that were significantly different from those of all three groups of regular educators in their ratings of the

statement that including learning disabled students in regular classes has an adverse effect on classmates. Principals expressed disagreement with the statement, (M = 2.03), which differs significantly from the 2.77 mean of intermediate teachers, and the 3.00 mean of specials. Special educators' average of 2.05 is significantly different from the averages of all regular educators, which range from 2.70 to 3.00. Principals and special educators disagreed that learning disabled students' inclusion in regular classrooms results in adverse effects for their typical classmates. Regular teachers reported uncertainty on this issue.

The issue of support for regular teachers by special educators is another area in which there are significant mean differences among respondent groups. Both principals, (M = 3.73), and special educators, (M = 3.75), are close to the strongly agree rating, viewing current practice as providing adequate support. Their ratings significantly differ with those of both primary, (M = 2.82), and intermediate, (M = 2.89), educators, whose views are closer to undecided, but on the side of disagreement with the stimulus statement. Although principals and special educators expressed their beliefs that current inclusion practices are adequately supported, two groups of regular teachers were undecided.

With reference to the statement that learning disabled students who are included in regular education classes are more likely to graduate from high school, the averages for all respondents indicated some indecision. The mean for

intermediate teachers (3.09) is significantly more pessimistic than the mean response (3.62) of the principals.

Another item which elicited significantly different means was the statement that regular educators who successfully teach learning disabled students are assigned more of them. The mean for principals (2.73) is slightly more than halfway between disagree and undecided and is significantly different from the means for intermediate, (3.61), primary (3.55), and special educators (3.50).

In response to the statement that parents of learning disabled students have greater influence than professionals on the placement of their children in regular classrooms, principals tended to disagree ($\underline{M}$ = 2.30). All regular educators significantly differed, ranging from a mean of 3.16--close to undecided, for intermediate--to a mean of 3.38, for specials. Principals approached disagreement with the idea that parents exert more influence than professionals on issues of inclusive placement, while all regular teachers were significantly less convinced.

Extra time and attention from the regular education teacher is another subject on which administrators and special educators demonstrated significantly different perceptions from those of regular educators. The former two groups responded close to agree, with means of 3.80 and 3.86, respectively, while the intermediate, specials, and primary teachers had average responses about halfway between agree and strongly agree, with means of 4.47, 4.51, and 4.56,

respectively. Although all regular educator groups recorded agreement to strong agreement that learning disabled students require extra time and attention from them, principals and special education teachers' ratings did not reach agreement with this issue.

Significant differences also exist between principals and all other educators relative to the statement that the principal regularly checks on the need for support for the education of learning disabled students in regular classes. The administrators achieved a mean close to strongly agree, 3.77, while the average ratings for the other groups ranged from disagree to halfway between disagree and undecided: primary, 2.07; intermediate, 2.18; specials, 2.28, and special educators, 2.43. Only administrators expressed agreement with this item.

Whether learning disabled students' make adequate academic progress in regular classes is another area of disparity. Special educators' mean of 3.49, halfway between undecided and agree, differs significantly from the means of primary, 2.78, intermediate, 2.79, and specials teachers, 2.94. Principals' perceptions, 3.40, are significantly different from those of primary teachers. On this item, special educators conveyed a relatively positive viewpoint, but all regular educator groups reflected indecision.

The means for both principals and special educators are significantly different from those of all regular educators with regard to the statement that including learning disabled

students in regular classes results in more resources and support for the regular educators. While special educators are close to agree (M = 3.71), and principals midway between undecided and agree (M = 3.50), the means for regular educators are midway between disagree and undecided, 2.32 to 2.47. Administrators and special educators indicated their perceptions that regular educators receive more resources and support for inclusion than the regular teachers believe they receive.

Principals agree (M = 4.13) that they are influential in the decision to include learning disabled students in regular classes. Intermediate and specials teachers, however, demonstrate significant differences in their perceptions, achieving means of 3.31 and 3.43, respectively.

The statement that typical students benefit from the inclusion of learning disabled students in regular classes elicited significant differences between principals (M = 3.77) and specials teachers (M = 3.10) and between special educators (M = 3.90) and specials and primary teachers (M = 3.27). Administrators and specials teachers significantly differed with regard to the benefits of inclusion for typical students, with the former groups expressing close to agreement with the item. Special educators reflected even more agreement with this item, significantly differing with both specials and primary teachers.

All regular educator groups differ significantly from both special educators and principals in their mean responses

to the statement that the regular teacher exerts influence in the decision to include a learning disabled student in his/her class. Principals' ratings are close to agree (M = 3.83) and special educators' ratings are midway between undecided and agree (M = 3.48). In contrast, regular educators' ratings range from midway between disagree and undecided for specials (M = 2.58) to close to undecided for intermediate teachers (M = 2.75).

The means for special educators and specials are significantly different in their views of the efficacy of team- or co-teaching in meeting the needs of all students in regular classes. Specials are undecided (M = 2.93) while special educators are midway between undecided and agree (M = 3.60).

The statement that having special education staff work with learning disabled students in regular classes is disruptive to learning elicited a mean rating of 2.0, disagree, from special educators, and significantly different ratings from both primary, 2.70, and specials teachers, 2.84, who are close to undecided on this issue.

Principals rated the item dealing with Student/Teacher Assistance teams providing support to regular educators in making accommodations to meet academic needs of learning disabled students in regular classes significantly higher (M = 3.80) than intermediate teachers (M = 2.91).

Special educators and specials teachers differed significantly in their ratings of the statement that learning

disabled students make more progress when instructed academically in resource settings. The special educators' mean rating of 3.03 indicated that this group is undecided, while the specials' rating of 3.60 showed their perceptions to be midway between undecided and agree.

Different Perceptions of Ideal Practices

Administrators indicated significantly higher agreement (M = 4.23) with the statement that, ideally, regular educators have the skills and knowledge to teach learning disabled students, than primary (M = 3.43) and special teachers (M = 3.49). Special educators achieved even higher (M = 4.37), as well as significantly different, agreement on this item. Although principals and special educators indicated their confidence that regular teachers have the ability to teach students with learning disabilities, primary and specials teachers significantly differed with their ratings.

The item that, ideally, the learning disabled student should be weighted as more than one student for purposes of determining class size was rated lowest by administrators (M = 3.23) and significantly higher by all regular educators (specials, M = 4.03; primary, M = 4.22; and intermediate, M = 4.27).

A statement on which there were significant differences for both current and ideal practices--recognition or compensation for regular educators who successfully teach learning disabled students--exemplifies the incongruence

between administrator and teacher perceptions. For current practices, administrators demonstrated the least disagreement (M = 2.17); their mean rating was significantly different from the ratings of all regular educators. The mean rating by special educators was also significantly higher, 1.98, than the ratings of regular educators. In contrast, for the ideal practices with regard to teacher recognition, the highest agreement (M = 4.05) was for intermediate teachers, with the significantly different rating by administrators indicating indecision on this issue (M = 3.14).

Another statement on which administrators and regular educators achieved significantly different ratings for ideal practices--students without disabilities benefit from the inclusion of learning disabled students in regular education classes--yielded similar discrepancies. Administrators indicated close to agree (M = 3.77), differing significantly from the undecided of specials (M = 3.10).

The item stating that academic needs of learning disabled students are met in separate resource settings, taught by special education staff, yielded ratings closer to agree for primary and special teachers (M = 3.70), but on the lower side of undecided for administrators (M = 2.97).

Different Perceptions of Current and Ideal Practices

A purpose of the study was to determine if respondents' perceptions of current inclusion practices in their buildings differed from their conceptions of ideal inclusion practices. To examine this issue, t-tests were calculated, using the "A"

or current variable score in comparison with the "B" or ideal variable score. The paired t-tests yielded evidence that regular and special educators and principals share significantly different perceptions of current vs. ideal for 14 of the 35 variable pairs. Analysis of the t-values revealed that, for 13 of the 14, there was a progression of lower t-values for principals, with the next highest for special educators, and the highest for regular educators. These results indicated that the greatest spread between current and ideal perceptions is for regular educators, while principals' ratings showed the smallest spread.

In addition, there were significant differences in the perceptions of current and ideal practices by both special and regular educators for eight variables. Table 5 (Appendix E) lists the items, t-values, and effect sizes for those questions on which there were significantly different mean scores for current and ideal practices.

Different Perceptions by Various Demographic Features

Although there were some significant differences in the mean ratings calculated for subpopulations of the variables of building numbers, years of administrative experience, years of experience in special education, special education numbers, and education, no patterns of differences were observed between or among the groups comprising these variables.

For the variable, endorsement, there emerged a set of significant differences between the mean ratings for

respondents with regular education endorsements and those with dual (both regular and special education) endorsements. Statistically significant differences between these two groups emerged in their ratings for the following current practices: inclusion requiring changes in instruction, adverse effect on the education of classmates, adequate support from special education staff, learning disabled students' requiring extra time and attention from the regular teacher, adequate academic progress for included students, inclusion resulting in more resources and support for the regular teacher, inclusion requiring instructional and management changes, benefits for students without disabilities, regular educator's influence on including the learning disabled student in the classroom, team- or co-teaching meeting the needs of all students, special educators' presence in the classroom causing disruption of learning, learning disabled students' making more progress in resource settings, and learning disabled students' attaining better math skills when taught in regular classes.

Respondents reporting dual endorsement were more positive about the effectiveness of current inclusive practices, less inclined to think that inclusion had negative consequences, and not convinced that inclusion placed increased demands on the regular education teacher.

In addition, with regard to ideal practices, respondents with regular education endorsement achieved significantly different ratings from dually endorsed respondents on the

following issues: meeting the educational needs of learning disabled students in regular classrooms; inclusion improving academic achievement of learning disabled students; regular and special educators' use of the same instructional strategies with learning disabled students; most regular educators, with training, can provide appropriate instruction for learning disabled students; meeting the academic needs of learning disabled students in resource settings; and learning disabled students' making more academic progress in resource settings.

Dually endorsed individuals perceived ideal inclusion to have more beneficial academic effects than did those with regular education endorsements.

Respondents' ratings were also significantly different when those with 1 to 8 years of regular education experience were compared to veterans with 20 to 54 years of experience. Significant differences were observed for perceptions of current practice regarding inclusion of learning disabled students and the following: adequate or improvement of academic achievement, support from special education staff, improved high school graduation rate, extra time and attention required of regular teacher, increased resources and support for the regular teacher, regular teachers' ability to provide appropriate instruction with training, regular teacher's influence on inclusion, team- or co-teaching meeting the needs of all students, and special educators' presence in the classroom being disruptive. In

each case, less experienced teachers tended to be more positive about the effectiveness of and supports for inclusion.

Relative to ideal practices in the inclusion of learning disabled students, similar significant differences in the same direction were demonstrated for: meeting educational needs in regular classrooms, regular teachers' having the necessary skills and knowledge, need for instructional changes, improvement of academic achievement, benefits for students without disabilities, team- or co-teaching meeting the needs of all students, and special educators' presence in the classroom being disruptive.

Significant differences in perceptions of inclusion were observed for respondents depending on the school setting they reported. With regard to the current effectiveness of the regular classroom in educating the learning disabled student, professionals in urban and central city settings tended to be less positive, although educators from these two settings significantly differed on the issue of the need for instructional and classroom management changes required for inclusion under ideal conditions. For this item, urban teachers agreed ($\underline{M}$ = 4.12) that changes are necessary, while those from the central city ($\underline{M}$ = 3.20) were undecided. Rural educators ($\underline{M}$ = 2.90) and those from the central city ($\underline{M}$ = 2.00) registered significantly different perceptions of the effectiveness of the regular classroom in improving the reading skills of students with learning disabilities.

Similar significant disparities were found relative to the improvement of learning disabled students' writing skills in regular classrooms--rural (M = 2.97) and central city (M = 2.13). On issues regarding adequate academic progress in the regular classroom and meeting the educational needs of learning disabled students in the regular classroom, there also were similar significant differences.

Factor Analysis

In order to determine which variables in the set form logical subsets, the thirty-five variables which comprise responses to statements about current and ideal practices, respectively, were subjected to principal components analysis (PCA), to clarify the underlying structure of the relationships.

Several rotational schemes with a variety of extractions were run in order to determine which produced the most easily interpreted data. Comparisons of the output determined that varimax and no rotation best organized the information. Although there were fewer high loading variables with varimax rotation than with no rotation, and more marker variables with the former scheme, the two primary non-rotated factors for both current and ideal variables were more clearly differentiated. In addition, the varimax rotated factors included a number of variables with loadings close to or greater than .9, variables which completely defined, rather than contributed to, the factor. Examination of the factors produced by the non-rotated principal components extraction,

demonstrated that there were only a few variables with high loadings on more than one factor. For these reasons, the no rotated, PCA factor analysis was selected for use in the study.

Each of the two factor analysis procedures was run utilizing three different methods of treating missing data--listwise deletion of cases with missing values, replacement of missing values with the mean, and pairwise deletion of cases with missing values. Comparison of the initial and final statistics and factor loadings for all three methods demonstrated that the results were essentially the same, with only a few differences in high factor loadings and tenths of a percent differences for percent of variance.

The first factor analysis was conducted on the variables related to current perceptions. This procedure yielded 10 factors, the first two of which, accounting for 30.9% of the set variance, were judged appropriate for use in the study.

The primary factor in this analysis, CurrentFactor1, accounts for 21.7% of the variance in the set. It was titled "perceptions of current efficacy and appropriate implementation of inclusion," from the survey statements which achieved a loading of .4 or greater on this component. The second factor, CurrentFactor2, responsible for 9.2% of the variance, dealt with "perceptions of current supports and basic literacy skills acquisition." High loading items for this analysis are listed in Table 6 (Appendix F).

Survey participants' responses to statements about their

perceptions of the ideal implementation of the inclusion of learning disabled students were also subjected to a factor analysis procedure, which produced two factors, each with substantial numbers of variables with loadings of .4 or greater, displayed in Table 6 (Appendix F).

The high loading variables on the first ideal factor, IdealFactor1, accounting for 22% of the set variance, related to the efficacy of the inclusion model; it was labeled, "perceptions of ideal efficacy and appropriate implementation of inclusion." The second component, IdealFactor2, responsible for 8.5% of the variance, had high values for statements dealing with supports, resources and influence. It was named "perceptions of ideal supports for and influence in placement decisions."

There is considerable overlap in the items with high loadings on both the current and ideal first factors--CurrentFactor1 and IdealFactor1. Of the 19 high loading items on CurrentFactor1, perceptions of current efficacy, 74% also load high on IdealFactor1, perceptions of ideal efficacy. For this latter factor, 82% of the items are shared by CurrentFactor1. The substantial overlap of high loading statements for factors dealing with both current and ideal perceptions of efficacy supports the consistency of this set of items as an index of the effectiveness of inclusion.

Analysis of Variance with Factors

Oneway analyses of variance (ANOVA) using Tukey's honestly significant difference method (Norusis, 1990) were

conducted to examine relationships between demographic variables and the constructs produced by the factor analysis procedures.

Earlier in this chapter, it was noted that experience teaching students with learning disabilities and the setting in which that instruction took place are considered constants, since all but 10 of the respondents indicated they had such experience, and the overwhelming majority of that experience occurred in regular education settings. In addition, two of the demographic variables--race and sex--are considered constants due to the lack of differences among respondents.

Using the demographic variables assignment, education--highest degree earned, district setting, endorsement, years teaching regular education, building and special education student numbers, years in administration, and years teaching special education, multiple analysis of variance procedures were conducted.

Relative to all four factors, there were no statistically significant differences for years in administration, years teaching special education, building or special education student numbers.

For CurrentFactor1, perceptions of current effectiveness and appropriate implementation of inclusion, there were significant differences by years of teaching regular education. The mean for teachers with less experience, 1 through 8 years, significantly differed from the means for

the most experienced teachers, 20 to 54 years, and those with from 9 to 19 years, with a medium effect size of .48. The pattern was similar for teaching experience and IdealFactor1, the factor for ideal perceptions of effectiveness and implementation; the less experienced teachers significantly differed from the veterans with the most years of regular education service. This difference also achieved a medium effect size, .51.

There were significant differences in the means for special education and dual endorsement for CurrentFactor1, while, for IdealFactor1--ideal effectiveness--special education and dual endorsement means were both significantly different from the mean for regular education endorsed individuals. The effect size for the former comparison was small, .24; that for the latter comparison was close to large, .73.

Significant differences were found in the means for education and the current supports and literacy factor, CurrentFactor2. The average for individuals with an Ed.S. degree significantly differed from that for those with M.S. + 30 hours, B.S., and M.S., with a large effect size, 1.15.

Differences in means for assignment and CurrentFactor1 followed the pattern of the differences observed throughout the study; principals and special educators' means significantly differed from those of specials, primary and intermediate teachers. A similar disparity was evident in the means for principals and primary and intermediate teachers

for the current supports and literacy factor, CurrentFactor2.

Additional significant differences by assignment were revealed in the correlations for IdealFactor1, ideal effectiveness and implementation. The means for special educators and principals significantly varied from those of specials teachers. Effect sizes for all differences by assignment were large.

The means, probability, and effect sizes for the analyses of variance relative to the five factors are displayed in Table 7 (Appendix G). Examination of the relationships revealed that the significant differences by assignment, endorsement, and years of teaching regular education with regard to individual survey items were also evident in the larger constructs.

Chapter V

Summary, Conclusions, and Recommendations

The purpose of this dissertation was to investigate the perceptions of principals, regular and special educators in public elementary schools in Nebraska with regard to current and ideal practices of the inclusion of students with learning disabilities in regular education classrooms.

Information was collected by means of a survey developed for this study. A stratified random sample of approximately 5% of the public elementary educators in the Nebraska Department of Education database received surveys; 47% of those recipients responded.

The data from the completed surveys were analyzed by quantitative methods, including paired t-tests, analysis of variance, and factor analysis. Through factor analysis, two distinct subsets of the variables were identified involving the efficacy of and supports and resources for the inclusion of students with learning disabilities in regular classrooms.

The results of this study reveal significant differences among educators' perceptions of current and ideal practices in the inclusion of students with learning disabilities in the regular education classroom. The data suggest that there exist both significant and important differences between and among regular and special educators and administrators of public elementary schools in Nebraska.

Summary

Although differences among educators are most

pronounced with regard to current as opposed to ideal inclusion practices, there are some current practice issues with which they are in agreement.

Both administrators and teachers concur that educating students with learning disabilities in the regular classroom requires additional time and attention from the regular educator. They acknowledge that including this student population within the classroom demands instructional and classroom management changes. In addition, all respondent groups recognize that special educators have specialized knowledge and skills which they employ in educating learning disabled students.

Areas of dissimilarity among perceptions, however, are more striking and more numerous. Analysis of the results of the survey disclosed significant differences as described below in educators' views of the effectiveness of and supports and resources for the inclusion process.

Efficacy of Current Inclusion Practices

In general, administrators and special educators perceive current inclusion practices to be more effective in educating students with learning disabilities than do regular educators, even when the proclivities of both groups are in the same direction.

Principals and special educators perceive that learning disabled students improve their academic achievement in regular classrooms, while the regular educators in those classrooms are unconvinced that this effect ensues.

Significant dissension is evident in the ratings of special educators versus all regular educators with regard to adverse effects of inclusion on classmates of learning disabled students. The former group tends to recognize no negative effects on others, while regular teachers express uncertainty. Principals also disagree that there are negative effects, but their perceptions are significantly more favorable than those of intermediate and special teachers.

Similar significant disparity is manifest in respondents' views about the impact of inclusion on the graduation rates of learning disabled students. All participants express indecision, but principals' ratings are closest to agreement and intermediate teachers' are closest to indecision.

Another issue of significant difference is apparent in the ratings for the statement that learning disabled students make adequate academic progress in regular education classrooms. Special education teachers' views tend toward agreement, while all regular teachers' averages are close to undecided on the side of disagreement. Administrators' average rating, close to that of special educators, indicating agreement with the item, are significantly different from primary teachers.

Regular teachers express ambiguity in response to the assertion that typical students benefit from the inclusion of learning disabled students in regular classrooms, whereas both principals' and special education teachers' mean ratings

indicate they believe that classmates do benefit. Principals differ significantly from specials teachers; special educators differ significantly from both specials and primary teachers.

Significantly different perceptions are present in the ratings of special educators in contrast to those of primary and specials teachers with regard to the presence of special education teachers in regular classrooms being disruptive to learning. The former group disagrees that this presence causes disruption, while the latter groups convey uncertainty, on the side of disagreement.

With regard to the observation that learning disabled students make more progress when educated in resource rooms, special educators indicate indecision, while specials teachers significantly differ, tending more toward agreement.

Supports and Resources in Current Inclusion Practices

Although all three respondent groups disagreed that teachers have sufficient time for collaboration, elementary principals indicated significantly less disagreement with that statement than all categories of regular educators.

Inservice training for regular teachers in the area of inclusion is another issue about which principals and regular and special educators hold significantly different perceptions. While the administrators are equivocal whether regular educators participate in inservice training to prepare them to teach learning disabled students, all regular educators approach disagreement with this statement. Special

educators indicate indecision, on the side of disagreement with the statement.

Principals dispute the assertion that the inclusion of learning disabled students in regular classrooms is being promoted in order to reduce special education expenditures. Regular teachers, by contrast, significantly differ, conveying their uncertainty as to the validity of this statement. On this matter, special educators, although conveying ambiguity about the statement, significantly differ with primary teachers, but not with principals.

Recognition or compensation for regular teachers who successfully educate learning disabled students is another issue which elicited significantly different perceptions. Administrators tend to demur that, currently, regular teachers receive any such recognition. Special educators disagree with the statement. But regular educators are more polarized in their response to this issue, emphatically denying that they receive recognition for successful inclusion practices.

Although the patterns of principals' and regular and special educators' ratings are in similar directions, principals perceive current inclusion practices to be more effective and more supported with training and resources. On most issues, the pattern of special educators' ratings conforms with that of administrators.

Perceptions of Ideal Practices

With regard to respondents' perceptions of ideal

practices, there are fewer differences among educators. The taxonomy of differences, however, is similar.

Principals express their view that, ideally, regular educators have the skills and knowledge to teach learning disabled students. Special educators concur, while regular educators are less sanguine about the feasibility of their acquiring the requisite skills and knowledge. Although they believe that regular educators should have the skills and knowledge to teach learning disabled students, principals are undecided whether, ideally, recognition or compensation should be provided to the regular educators for assuming the responsibility for educating such learners. Administrators convey their view that the learning disabled student should not be weighted as more than one student, even though they acknowledge that such a student requires more attention and time from the teacher.

In general, principals appear to have accepted the arguments and beliefs of the proponents of inclusion--that, in ideal circumstances, learning disabled students improve their academic achievement when educated in the regular classroom, that the collaboration of special educators provides sufficient support, and that nondisabled classmates benefit from the inclusion of disabled peers. Regular educators are less confident that these benefits are likely to accrue even under ideal conditions.

Perceptions of Current vs. Ideal Practices

Respondents' perceptions of current inclusion practices

are significantly different from their concepts of ideal inclusion practices on a number of issues, indicating that their views of extant conditions and experiences are far from their conceptions of the exemplary.

With regard to the effectiveness of inclusion practices, all three respondent groups express significantly different views on current versus ideal situations on matters involving adequate academic progress and improved math skills when the learning disabled student is taught in the regular classroom.

Both special and regular educators hold significantly different views of current and ideal practices with reference to improved academic achievement, adverse and beneficial effects on classmates, and increased high school graduation rates.

Principals and regular teachers both hold significantly different perceptions of current and ideal practices with reference to the attainment of better reading and writing skills when those subjects are taught and learned in regular education classrooms. As well, these same two groups are significantly different in their perceptions of current versus ideal inclusion practices regarding the issue of whether special education teachers have specialized knowledge and skills which they use in educating learning disabled students. It appears that administrators and regular education teachers are more inclined to believe that special educators can improve their theoretical and pedagogical competencies.

All three respondent groups hold significantly different perceptions of current versus ideal practices with reference to issues involving supports and resources: regular teachers' skills and knowledge; weighting the learning disabled student as more than a single student for determining class size; time for collaboration; inservice training; recognition or compensation; the adequacy of support from special education staff, the principal, and the Student/Teacher Assistance Team; and the effectiveness of co-teaching.

Both special and regular education teachers share significantly different perceptions of current compared to ideal practices relative to influence issues including: the promotion of inclusion to reduce costs, regular and special educators using the same teaching strategies, and parents' versus regular teachers' influence in the classroom placement decisions.

Overall, it is evident that practicing educators in public elementary schools in Nebraska do not view current inclusion practices in their buildings to be close to their visions of the ideal. The difference between regular educators' perceptions of current vs. ideal practice is greater than the differences rated by either principals or special educators, indicating that regular teachers view current inclusion as farther from the ideal than do their administrative and special education colleagues.

Different Perceptions by Demographics

The endorsement of the responding educators emerged as

an influential element in shaping their perceptions. In general, respondents who reported having a regular education endorsement demonstrate less agreement with statements about the positive effects of inclusion; those with dual endorsements demonstrate the most agreement. It is likely that the apparent differences in perceptions by endorsement may be closely related to the many significant differences by assignment. Individuals with regular education endorsement are probably assigned to regular education, while those with dual endorsement may be assigned either to special or regular education. Their preservice training and dual perspectives provide these individuals with different conclusions regarding the inclusion process. It is evident from the results of this study that those with dual endorsement tend to have perceptions more closely affiliated with individuals endorsed in special education rather than regular education.

Relative to the efficacy of current inclusion practices, regular education endorsed individuals tend toward uncertainty about learning disabled students' academic gains and effects on classmates. Respondents with special education or dual endorsement indicate indecision to agreement that learning disabled students make more academic progress in regular classrooms and disagree that inclusion practices have negative effects on classmates.

Issues of support and resources were also rated along endorsement lines. Regular education endorsed respondents display ambiguity with regard to statements about the

adequacy of supports and team-teaching, while those with dual or special education endorsement report indecisiveness, leaning toward agreement. Relative to increased demands on the teacher of learning disabled students in regular classrooms, special education and dually endorsed individuals acknowledge that the students require extra time and attention, but regular education endorsed respondents are undecided, tending toward agreement. In contrast, the latter respondent group concurs that learning disabled students require instructional and classroom management changes, while those with dual endorsements approach, but do not achieve agreement with this statement.

For ideal practices, the returns of individuals with regular education endorsements indicate indecision to agreement for statements concerning academic gains and appropriate instruction for learning disabled students in regular classrooms. Respondents with dual or special education endorsements agree with these statements. The statement that the academic needs of learning disabled students are met in special education settings elicited agreement from dually endorsed respondents, in contrast to their positions on previous statements. Those with special education endorsements are midway between undecided and disagree on this issue.

There is evidence that the experience, or better training, and/or indoctrination of educators may shape their views of the effectiveness of and supports for the inclusion

of learning disabled students in regular classrooms. Beginning regular education teachers, those with from 1 to 8 years of experience, demonstrate significantly more positive perceptions of the efficacy of and available supports and resources for both current and ideal inclusion practices than do veteran teachers, those with from 20 to 54 years. This more positive attitude toward inclusion for teachers with less experience may also be related to the more positive attitudes of special educators, who average only 8 1/2 years of experience in their field.

With regard to issues of the effectiveness of current inclusion practices, beginning teachers' ratings range from undecided to midway between undecided and agree, while the ratings of veteran educators hover around undecided. Pertaining to supports and resources, beginners indicate ambiguity to near agreement. Veterans, on the other hand, report disagreement to indecision.

Similar disparities by years of experience are observed for ideal practices, but overall perceptions are more affirmative. Newer teachers approach or confirm agreement with each positive statement about inclusion, both effectiveness and supports. More experienced teachers indicate their perceptions are about midway between indecision and agreement.

It may be that the less experienced teachers received their preservice training during the last twelve years since the REI and inclusion emerged as trends in the field of

education. More recently educated teachers may have had formal college coursework on issues related to the inclusion of students with all kinds of disabilities in regular classrooms. It may be, however, that newer teachers lack the experience to make informed judgments about the efficacy of inclusive practices. Both explanations may be operative in less experienced teachers' positive perceptions of inclusion.

There are also significant differences in perceptions by setting. Educators from all settings express indecision to disagreement relative to the effectiveness of inclusion. Those from rural Nebraska schools, in which students of all ages and abilities are taught together, are significantly less negative about the effectiveness of the regular classroom for students with learning disabilities. It may be that the professionals from both ends of the school setting continuum have the fewest resources and the greatest demands on their time and energy, so their perceptions reflect their realities. For the teacher in a rural Nebraska setting, there may be no options for a learning disabled student to learn in a resource setting; the regular one-room school may be the only option. In the rural classroom, with a small student to teacher ratio, the presence of a student with a learning disability may not require as great a percentage of teacher time as that same student would in a classroom with more, and perhaps more difficult to teach, students. For the teacher in an inner city setting, working with students with concomitant social and economic issues, the additional burden of

educating a student with learning disabilities in the regular classroom induces the relatively negative perception of inclusion.

Conclusions

The conclusions discussed here are limited to the sample from whom the information was obtained.

Results of the statistical analyses of survey responses indicate the existence of numerous and substantial differences in the perceptions of current inclusion practices. In particular, elementary principals and regular education teachers hold significantly different views of the effectiveness of extant practices in including students with learning disabilities in regular classrooms.

Administrators perceive existent inclusion to be more effective in meeting the needs of students with learning disabilities or they perceive lesser needs for this population of learners than do regular education teachers. Special educators also tend to view inclusion as more effective than their regular education colleagues.

Current supports and resources for the inclusion of students with learning disabilities are believed by principals to be more abundant and available than they are by regular educators. Special education teachers share their administrators' viewpoints that regular education teachers receive more assistance for educating learning disabled students than the recipients of that support acknowledge.

Respondent groups' perceptions are less dissonant with

regard to ideal inclusion practices, although significant differences are evident. Generally, principals perceive optimal inclusion practices to yield greater benefits for students with learning disabilities than do regular education teachers. Regular teachers perceive a need for more support and resources than principals project as necessary.

Overall, there is greater consensus among all respondent groups with regard to their conceptions of ideal inclusion. However, their response averages for the ideal do not affirm agreement that the inclusion of students with learning disabilities in regular classrooms is effective educational practice.

Although there is no evidence of unqualified ratification of inclusion practices by any demographic group, there are significant differences between some groups with respect to their ratings of the stimulus statements. Among educators, those with a dual or special education endorsement express more positive perceptions of inclusion--both its effectiveness and the amount of support provided to the regular teacher. Relatively new teachers, those with from 1 to 8 years of experience, perceive inclusion more affirmatively than do veteran teachers, those with more than 20 years of experience. As well, educators from urban settings view inclusion more negatively than do their counterparts in more rural schools.

Recommendations

The implications from this research have application to

a number of important educational issues--participatory decision-making, staff development training, and student outcomes.

Given the evident dissonance between the perceptions of elementary principals and special educators, and regular education teachers with regard to current inclusion practices, several recommendations emerge for resolution of these differences.

More needs to be known about the reasons for the disparity among educators' perceptions. The administrator and regular and special educators for a given school should participate in ongoing discussions to establish and maintain a collaborative vision about the education of students with learning disabilities. Research on effective schools has demonstrated that, when the impetus for change originates outside the system, as is the case for inclusion, it is necessary to solicit support and feedback from the individuals who are expected to implement the change in order to secure their commitment to a new direction (Barth, 1980; Barth, 1991; Schlechty, 1990).

Elementary principals in Nebraska should work to forge consensus among stakeholders involved in the inclusion of students with learning disabilities in regular classrooms. In addition, they should elicit feedback, primarily from their regular classroom teachers, but also from their special educators, on perceptions of supports and resources. Clearly, regular elementary teachers do not view their

inclusion efforts as sufficiently well supported. It remains for the building principals to determine what efforts and practices would constitute sufficient support in the views of the classroom teachers.

Another essential component of effective change is the provision of continuous training for those who are expected to implement the change (Schlechty, 1990). The results of this study indicate that all respondents acknowledge the need for teachers to utilize special knowledge and skills in teaching students with learning disabilities. Yet neither responding principals nor teachers are certain whether the regular education teachers have received training in working with learning disabled students. At the very least, regular educators' lack of certainty that they have received training reflects their concerns that they do not possess the skills to teach learning disabled students.

There exists a need for systematic and ongoing training and staff development that is pursued to meet the expressed needs of the regular education teachers who work with the special students included in their classrooms (Barth, 1980). Building principals should conduct formal or informal needs assessments of their teachers relative to current inclusion practices in order to identify the objectives for this inservice training.

In addition to the solicitation of feedback on supports and training needs, elementary principals and their teachers should commit to a process of determining the educational

outcomes for their students with learning disabilities. The results of this research suggest that responding Nebraska educators may not be aware of the outcomes for their students with learning disabilities. It seems implausible that, even though inclusion practices were promulgated by government leaders, activists, and researchers, and were not necessarily embraced by practitioners, Nebraska educators have been implementing the process without knowledge of the results for individual learners. Schools should establish a system of accountability for academic outcomes for their learning disabled students, those educated in regular education classrooms and those in resource or special education settings.

It may be that the tepid endorsements of inclusion by the responding educators reflect conflicting results they have experienced in their work with learning disabled students, results that mirror the equivocal outcomes for the students participating in the three-year long university studies by Zigmond et al. (1995a). If Nebraska teachers and administrators have observed either positive or negative consequences of instructional placements for students with learning disabilities, those findings were not uncovered by this study. Perhaps the addition of questions specifically directed to outcomes for learning disabled students included in regular classrooms compared to those educated in special education settings would reveal that educators perceived one placement to be superior to the other. It would also be

important to determine the percentage of learning disabled students in each educator's building who are educated primarily in the regular classroom, their progress in academic skills, and whether the inclusive practices were supplemented by additional special or regular education instruction.

The single most impressive result of this study is the absence of positive perceptions of the inclusion of students with learning disabilities even under ideal circumstances. Across all respondent groups, there is no agreement that, even ideally, inclusion can be an effective educational practice, despite evidence that, currently, learning disabled students are being included in regular classrooms.

Regardless of the reason behind respondents' indecision on the effectiveness of inclusion, it is arguably poor practice to engage in instructional arrangements and practices that are not supported by educational research or by data on educational outcomes for the involved learners. The acceptance and implementation of the inclusion of students with learning disabilities in regular classrooms exposes educators to the often expressed criticism of public schools--that public school administrators and teachers adopt new ideas for instruction without sound research that demonstrates its efficacy.

Implications for Future Research

Research to improve and extend the scope of this study should focus on eliciting more specific information on the

inclusion of students with learning disabilities and enlarging the respondent database.

What percent of students with learning disabilities are educated in the regular classroom?

For those learning disabled students who are educated in the regular classroom, what subjects are targeted in that setting? for how much time?

Do students with learning disabilities who are instructed in the regular classroom spend additional time in a resource setting? how much time? for what subjects?

What criteria are used to make the decision to instruct a learning disabled student in the regular classroom?

What criteria are used to make changes in a learning disabled student's inclusion in the regular classroom? to reduce the amount of time in the regular classroom? to increase the amount of time?

What percent of students with learning disabilities do you think can successfully learn academics in the regular education classroom?

What formal coursework or training have you taken to prepare you to teach students with learning disabilities?

Responses to these questions from elementary principals, regular and special educators could help explain the apparent indecision or lack of conviction expressed by respondents in their ratings for items in this study. As well, it would be advantageous to survey professors in colleges of education to determine the information on and philosophy of inclusion they

teach in the preservice training programs of regular and special educators and administrators.

The lack of agreement among Nebraska educators concerning students with mild disabilities does not bode well for agreement with regard to the inclusion of students with more severe disabilities, specifically, those with behavioral disorders--students for whom quality academic instruction is as important as it is for students with learning disabilities. A modification of the Inclusion Perceptions Survey (Appendix H) instrument may be utilized to examine the perceptions of educators relative to the regular classroom inclusion of students with behavioral impairments.

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Appendices

Appendix A Table 1
Comparison of Pre- and Post-Survey Reminder Results

Demographic Variable	Mean (Standard Deviation) Pre	Post	Difference in Means
Assignment	7.17 (3.24)	6.24 (3.33)	-.93
Building Numbers	312.49 (188.72)	347.89 (186.93)	+35.40
Education	1.83 (.94)	1.68 (.74)	-.15
Endorsement	1.48 (.83)	1.51 (.87)	+.03
Gender	1.81 (.39)	1.96(.20)	+.15
Experience with LD students	1.03 (.17)	1.04 (.20)	+.01
Setting teaching LD students	1.47 (.78)	1.44 (.81)	-.03
District enrollment	6664.70 (12270)	5401.52 (10889)	-1263.18
Race	1.06 (.39)	1.01 (.12)	-.05
Setting	2.57 (1.12)	2.62 (.98)	+.05
Special education students	39.49 (39.28)	44.35 (50.42)	+4.86
Years in administration	13.39 (8.09)	8.50 (9.19)	-4.89
Years in special education	8.11 (6.11)	10.50 (7.38)	-2.39
Years in regular education	15.14 (10.25)	14.43 (8.07)	-.71

Appendix B Table 2
Respondent Variable Frequencies

Variable	Frequency	Percent
Gender		
Male	48	15.6
Female	260	84.4
Race		
Caucasian	299	97.7
Afri-Amer	4	1.3
Amer-Indian	2	.7
Asian	1	.3
Education		
BS	142	46.3
MS/MA	101	32.9
MS + 30	50	16.3
EdS	12	3.9
EdD/PhD	2	.7
Setting		
Rural	40	13.2
Small Town	134	44.2
Suburban	57	18.8
Urban	57	18.8
Central City	15	5.0
LD Experience		
Yes	298	96.8
No	10	3.2
LD Setting		
Regular ed	215	72.1
Special ed	28	9.4
Both	55	18.5
Endorsement		
Regular ed	195	73.3
Special ed	12	4.5
Dual	59	22.2
Special education student numbers in building		
1 - 18	73	25.1
19 - 28	67	23.0
29 - 48	79	27.1
50 - 300	72	24.7
Assignment		
Primary		
Kindergarten	11	3.7
Grade 1	32	10.7
Grade 2	23	7.7
Grade 3	19	6.4
Intermediate		
Grade 4	23	7.7
Grade 5	21	7.0
Grade 6	13	4.3
Specials		
Specials	28	9.4
Miscellaneous	55	18.4
Special Ed	44	14.7
Principal	30	10.0
Years of teaching regular education		
1 - 8	90	32.3
9 - 19	96	34.4
20 - 54	93	33.3
Years of teaching special education		
1 - 4	25	32.9
5 - 9	22	28.9
10 - 26	29	38.2
Years in administration		
1 - 7	12	36.4
8 - 15	10	30.3
16 - 31	11	33.3
Building student numbers		
1 - 200	74	24.2
201 - 300	75	24.5
301 - 430	80	26.1
431 - 900	77	25.2

Appendix C Table 3 Survey Statement Means					Mean	(SD)
1A	regular class	2.99	(1.17)	19A adequate academics	3.00	(1.06)
1B	regular class	3.67	(1.25)	19B adequate academics	3.76	(.99)
2A	teacher knowledge	2.58	(1.14)	20A Sped know & skills	4.11	(1.00)
2B	teacher knowledge	3.74	(1.18)	20B Sped know & skills	4.56	(.63)
3A	weight LD student	2.26	(1.16)	21A resources/support	2.71	(1.26)
3B	weight LD student	4.02	(1.03)	21B resources/support	4.21	(.85)
4A	time/regular class	3.09	(1.19)	22A principal influence	3.55	(1.13)
4B	time/regular class	3.10	(1.27)	22B principal influence	3.77	(.88)
5A	instruction changes	3.46	(1.16)	23A instr & management	4.06	(.85)
5B	instruction changes	3.35	(1.22)	23B instr & management	3.90	(1.04)
6A	time to collaborate	1.92	(1.13)	24A student benefit	3.40	(1.09)
6B	time to collaborate	4.39	(.90)	24B student benefit	3.78	(1.01)
7A	academic gain/reged	3.28	(1.07)	25A reged training	3.46	(1.07)
7B	academic gain/reged	3.73	(1.04)	25B reged training	3.70	(1.14)
8A	inservice reged	2.44	(1.18)	26A reged influence	2.90	(1.24)
8B	inservice reged	4.35	(.77)	26B reged influence	3.93	(.91)
9A	reged recognition	1.67	(.80)	27A separate settings	3.21	(1.22)
9B	reged recognition	3.65	(1.23)	27B separate settings	3.44	(1.18)
10A	inclusion savings	2.93	(1.34)	28A co-/team-teaching	3.13	(1.20)
10B	inclusion savings	2.05	(1.11)	28B co-/team-teaching	3.85	(1.08)
11A	adverse effects	2.63	(1.22)	29A Sped in reged class	2.56	(1.20)
11B	adverse effects	2.19	(1.12)	29B Sped in reged class	2.20	(1.15)
12A	Sped support	3.18	(1.27)	30A SAT support	3.19	(1.25)
12B	Sped support	4.48	(.68)	30B SAT support	4.24	(.72)
13A	graduation	3.27	(.85)	31A more acad in Sped	3.38	(1.04)
13B	graduation	3.70	(.98)	31B more acad in Sped	3.34	(1.12)
14A	instruction strat	2.59	(1.08)	32A Sped/reged influence	3.12	(1.16)
14B	instruction strat	3.18	(1.33)	32B Sped/reged influence	3.49	(1.05)
15A	more LD students	3.37	(1.15)	33A reading in reged	2.62	(.94)
15B	more LD students	2.82	(1.13)	33B reading in reged	2.94	(1.10)
16A	parent influence	3.13	(1.20)	34A writing in reged	2.74	(.97)
16B	parent influence	2.41	(.98)	34B writing in reged	2.99	(1.12)
17A	extra time/attent	4.35	(.76)	35A math in reged	2.70	(1.01)
17B	extra time/attent	3.50	(1.17)	35B math in reged	2.99	(1.10)
18A	principal support	2.36	(1.19)			
18B	principal support	4.20	(.72)			

Note. Full text of statements can be found in Appendix H.

Appendix D Table 4
ANOVA Identified Statistically Significant Differences in Perceptions for Administrators and Regular Classroom Teachers

Inclusion Practices	Adm M (SD)	Regular Classroom Teachers M (SD) Primary	Intermediate	Specials	p	Effect Size
Current Practices						
6 Regular and special education teachers have regular time within the school day to collaborate on the education of the student with a learning disability.	2.63(1.13)	1.67(1.05)	1.74(1.08)	1.96(1.11)	.001	.77
7 The inclusion of learning disabled students in regular education classes improves their academic achievement.	3.87(.86)	3.18(1.01)		2.99(1.02)	.000	.77
8 Regular education teachers participate in inservice training to prepare them for teaching students with learning disabilities.	3.37(1.19)	2.17(1.12)	2.12(1.05)	2.55(1.14)	.000	.99
9 Regular education teachers who successfully teach learning disabled students receive recognition or compensation.	2.17(.93)	1.53(.61)	1.40(.53)	1.58(.84)	.000	1.01
10 The inclusion of learning disabled students in regular education classes is being promoted mainly to reduce special education costs.	1.90(1.01)	3.25(1.38)	3.05(1.34)	3.06(1.28)	.000	.92
11 The inclusion of learning disabled students in regular education classes generally has an adverse effect on the education of classmates.	2.03(1.02)		2.77(1.05)	3.00(1.26)	.000	.74
12 Regular education teachers with learning disabled students receive adequate support	3.73(1.01)	2.82(1.28)	2.89(1.21)		.000	.70

Adm = Administrators; Primary = Primary Teachers; Intermediate = Intermediate Teachers; Specials = Art, PE, etc.

Appendix D Table 4
ANOVA Identified Statistically Significant Differences in Perceptions for Administrators and Regular Classroom Teachers, continued

Inclusion Practices	Adm M (SD)	Regular Classroom Teachers M (SD) Primary	Intermediate	Specials	p	Effect Size
15 Regular education teachers who successfully teach students with learning disabilities are usually assigned more of these students.	2.73(1.11)	3.55(1.19)	3.61(1.03)		.002	.77
16 Parents of students with learning disabilities have more influence than professional staff in the placement of their children in regular education classes.	2.30(.99)	3.24(1.25)	3.16(1.25)	3.38(1.14)	.000	.79
17 Students with learning disabilities in regular education classes require extra time and attention from the regular education teacher.	3.80(1.10)	4.56(.57)	4.47(.50)	4.51(.74)	.000	1.18
18 The principal regularly checks on the need for support for the education of learning disabled students in regular education classes.	3.77(.77)	2.07(1.12)	2.18(1.05)	2.28(1.10)	.000	1.46
21 The inclusion of learning disabled students in regular classes usually results in more resources and support for the regular education teachers.	3.50(1.01)	2.32(1.13)	2.47(1.23)	2.44(1.15)	.000	.93
22 The principal has influence in the decision to include learning disabled students in regular education classes.	4.13(.63)		3.32(1.21)	3.43(1.15)	.015	.64
26 The regular education teacher exerts influence in the decision to include a learning disabled student in his/her class.	3.83(.83)	2.71(1.25)	2.75(1.27)	2.58(1.16)	.000	.70

Adm = Administrators; Primary = Primary Teachers; Intermediate = Intermediate Teachers; Specials = Art, PE, etc.

Appendix D Table 4
ANOVA Identified Statistically Significant Differences in Perceptions for Administrators and Regular Classroom Teachers, continued

Inclusion Practices	Adm M (SD)	Regular Classroom Teachers M (SD) Primary	Intermediate	Specials	p	Effect Size
Ideal Practices						
2 Regular education teachers have the skills and knowledge to teach students with learning disabilities.	4.23(.82)	3.43(1.33)		3.49(1.17)	.000	.62
3 A student with a learning disability is weighted as more than a single student for purposes of determining class size.	3.23(1.14)	4.22(.98)	4.27(.83)	4.03(.95)	.000	1.03
27 The academic needs of learning disabled students are met in separate resource settings, taught by special education staff.	2.97(1.16)	3.68(1.02)		3.69(1.14)	.000	.66

Adm = Administrators; Primary = Primary Teachers; Intermediate = Intermediate Teachers; Specials = Art, PE, etc.

Appendix D Table 4
ANOVA Identified Statistically Significant Differences in Perceptions for Special Education Teachers and Regular Classroom Teachers

Inclusion Practices	SPED M (SD)	Regular Classroom Teachers M (SD)			p	Effect Size
		Primary	Intermediate	Specials		
Current Practices						
9 Regular education teachers who successfully teach learning disabled students receive recognition or compensation.	1.98(.76)	1.53(.61)	1.40(.53)	1.58(.84)	.000	.72
11 The inclusion of learning disabled students in regular education classes generally has an adverse effect on the education of classmates.	2.05(1.13)	2.70(1.22)	2.77(1.05)	3.00(1.26)	.000	.66
12 Regular education teachers with learning disabled students receive adequate support	3.75(.99)	2.82(1.28)	2.89(1.21)		.000	.72
17 Students with learning disabilities in regular education classes require extra time and attention from the regular education teacher.	3.86(.83)	4.56(.57)	4.47(.50)	4.51(.74)	.000	1.09
19 Learning disabled students make adequate progress in regular education classes.	3.49(.95)	2.78(1.01)	2.79(1.10)	2.94(1.04)	.001	.62
21 The inclusion of learning disabled students in regular classes usually results in more resources and support for the regular education teachers.	3.71(1.21)	2.32(1.13)	2.47(1.23)	2.44(1.15)	.000	1.11
24 Students without disabilities benefit from the inclusion of learning disabled students in regular education classes.	3.90(.88)	3.27(1.14)		3.10(1.10)	.001	.64

SPED = Special Educators; Primary = Primary Teachers; Intermediate = Intermediate Teachers; Specials = Art, PE, etc.

Appendix D Table 4
ANOVA Identified Statistically Significant Differences in Perceptions for Special Education Teachers and Regular Classroom Teachers, continued

Inclusion Practices	SPED M (SD)	Regular Classroom Teachers M (SD)			p	Effect Size
		Primary	Intermediate	Specials		
26 The regular education teacher exerts influence in the decision to include a learning disabled student in his/her class.	3.48(1.11)	2.71(1.25)	2.75(1.27)	2.58(1.16)	.000	.65
29 Having special educators team or co-teach the regular class meets the needs of all students in the regular education class.	2.00(.91)	2.70(1.20)		2.84(1.32)	.004	.61
Ideal Practices						
1 The educational needs of students with learning disabilities are met in regular classrooms.	4.34(.99)	3.36(1.30)		3.46(1.29)	.000	.72
2 Regular education teachers have the skills and knowledge to teach students with learning disabilities.	4.37(.72)	3.43(1.33)		3.49(1.17)	.000	.73
27 The academic needs of learning disabled students are met in separate resource settings, taught by special education staff.	2.73(1.11)	3.68(1.02)	3.50(1.28)	3.69(1.14)	.000	.78

SPED = Special Educators; Primary = Primary Teachers; Intermediate = Intermediate Teachers; Specials = Art, PE, etc.

Appendix E Table 5

Paired t-tests: Significantly Different Mean Scores for Current vs Ideal Practices

Survey Items	Principal			Special Ed			Regular Ed		
	t	p	ES	t	p	ES	t	p	ES
1 The educational needs of students with learning disabilities are met in regular classrooms.	-4.42	.00	.79	-5.88	.00	1.13	-6.84	.00	.50
2 Regular education teachers have the skills and knowledge to teach students with learning disabilities.	-5.90	.00	1.48	-8.37	.00	1.62	-11.75	.00	.87
3 A student with a learning disability is weighted as more than a single student for purposes of determining class size.	-2.52	.01	.53	-5.05	.00	1.04	-19.26	.00	1.94
6 Regular and special education teachers have regular time within the school day to collaborate on the education of a student with a learning disability.	-6.33	.00	1.53	-12.14	.00	2.67	-27.68	.00	2.66
7 The inclusion of learning disabled students in regular education classes improves their academic achievement.	_____			-3.64	.00	.46	-7.60	.00	.44
8 Regular education teachers participate in inservice training to prepare them for teaching students with learning disabilities.	-5.31	.00	1.11	-9.92	.00	2.57	-21.13	.00	2.11
9 Regular education teachers who successfully teach learning disabled students receive recognition or compensation.	-4.10	.00	.94	-6.47	.00	1.52	-22.50	.00	2.29
10 The inclusion of learning disabled students in regular education classes is being promoted mainly to reduce special education costs.	_____			3.71	.00	.49	9.65	.00	.83
11 The inclusion of learning disabled students in regular education classes generally has an adverse effect on the education of classmates.	_____			2.43	.02	.26	6.45	.00	.43

Special Ed = Special Education Teacher; Regular Ed = Regular Classroom Teacher ES = Effect Size

Appendix E Table 5
Paired t-tests: Significantly Different Mean Scores for Current vs Ideal Practices, continued

	Principal			Special Ed			Regular Ed		
	t	p	ES	t	p	ES	t	p	ES
12 Regular education teachers with learning disabled students receive adequate support from special education staff.	-3.53	.00	.72	-5.99	.00	1.05	-15.65	.00	1.51
13 Students with learning disabilities who are included in regular education classes are more likely to graduate from high school.	_____			-2.08	.04	.33	-7.73	.00	.54
14 Regular and special education teachers use the same instructional strategies in teaching students with learning disabilities.	_____			-5.36	.00	.98	-5.73	.00	.43
16 Parents of students with learning disabilities have more influence than professional staff in the placement of their children in regular education classes.	_____			2.24	.03	.37	8.63	.00	.77
18 The principal regularly checks on the need for support for the education of learning disabled students in regular education classes.	-2.84	.01	.55	-8.87	.00	1.99	-23.57	.00	2.33
19 Learning disabled students make adequate academic progress in regular education classes.	-4.54	.00	.73	-4.13	.00	.79	-10.61	.00	.79
20 Special education teachers have specialized knowledge and skills they use in educating learning disabled students.	-2.77	.01	.46	_____			-7.12	.00	.62
21 The inclusion of learning disabled students in regular classes usually results in more resources and support for the regular education teachers.	-4.17	.00	.90	-2.60	.01	.44	-19.86	.00	1.83

Special Ed = Special Education Teacher; Regular Ed = Regular Classroom Teacher ES = Effect Size

Appendix E Table 5

Paired t-tests: Significantly Different Mean Scores for Current vs Ideal Practices, continued

	Principal			Special Ed			Regular Ed		
	t	p	ES	t	p	ES	t	p	ES
24 Students without disabilities benefit from the inclusion of learning disabled students in regular education classes.	_____			-2.55	.01	.29	-7.02	.00	.41
25 With training, most regular educators can provide appropriate instruction for learning disabled students in regular education classes.	-2.20	.04	.31	-3.39	.00	.39	2.90	.00	.18
26 The regular education teacher exerts influence in the decision to include a learning disabled student in his/her class.	_____			-2.24	.03	.31	-14.34	.00	1.20
28 Having regular and special educators team or co-teach the regular class meets the needs of all students in the regular education class.	-2.97	.01	.52	-4.06	.00	.71	6.10	.00	.66
30 The building Student/Teacher Assistance Team provides support to regular educators in making accommodations to meet the academic needs of learning disabled students in regular classes.	-3.53	.00	.84	-6.14	.00	1.11	-11.93	.00	1.11
33 The learning disabled student attains better reading skills when reading is taught and learned in the regular education classroom.	-2.81	.01	.51	_____			-5.03	.00	.33
34 The learning disabled student attains better writing skills when writing is taught and learned in the regular education classroom.	-2.07	.05	.27	_____			-4.26	.00	.27
35 The learning disabled student attains better math skills when math is taught and learned in the regular education classroom.	-2.58	.02	.33	-2.71	.01	.26	-4.12	.00	.28

Special Ed = Special Education Teacher; Regular Ed = Regular Classroom Teacher ES = Effect Size

Appendix F Table 6

Means, Standard Deviations, and Factor Loadings from Factor Analysis

CurrentFac1: Perceptions of current efficacy and appropriate implementation of inclusion (21.7% of variance)

	M	SD	Item Loading
1 The educational needs of students with learning disabilities are met in regular classrooms.	2.99	1.17	.512
5 The inclusion of a learning disabled student in the regular education class requires significant changes in instruction.	3.46	1.16	-.406
7 The inclusion of learning disabled students in regular education classes improves their academic achievement.	3.28	1.07	.699
10 The inclusion of learning disabled students in regular education classes is being promoted mainly to reduce special education costs.	2.93	1.34	-.526
11 The inclusion of learning disabled students in regular education classes generally has an adverse effect on the education of classmates.	2.63	1.22	-.712
12 Regular education teachers with learning disabled students receive adequate support from special education staff.	3.18	1.27	.494
13 Students with learning disabilities who are included in regular education classes are more likely to graduate from high school.	3.27	.85	.568
18 The principal regularly checks on the need for support for the education of learning disabled students in regular education classes.	2.36	1.19	.416
19 Learning disabled students make adequate academic progress in regular education classes.	3.00	1.06	.707
21 The inclusion of learning disabled students in regular classes usually results in more resources and support for the regular education teachers.	2.71	1.26	.534
24 Students without disabilities benefit from the inclusion of learning disabled students in regular education classes.	3.40	1.09	.640
25 With training, most regular educators can provide appropriate instruction for learning disabled students in regular education classes.	3.46	1.07	.475

Appendix F Table 6

Means, Standard Deviations, and Factor Loadings from Factor Analysis

	M	SD	Item Loading
26 The regular education teacher exerts influence in the decision to include a learning disabled student in his/her class.	2.90	1.24	.475
28 Having regular and special educators team or co-teach the regular class meets the needs of all students in the regular education class.	3.13	1.20	.554
29 Having special education staff work with learning disabled students in regular education classes is disruptive to the learning of students without disabilities.	2.56	1.20	-.597
31 Learning disabled students make more progress when they receive academic instruction in a resource/ special education setting.	3.38	1.04	-.652
33 The learning disabled student attains better reading skills when reading is taught and learned in the regular education classroom.	2.62	.94	.605
34 The learning disabled student attains better writing skills when writing is taught and learned in the regular education classroom.	2.74	.97	.633
35 The learning disabled student attains better math skills when math is taught and learned in the regular education classroom.	2.70	1.01	.577

Appendix F Table 6

Means, Standard Deviations, and Factor Loadings from Factor Analysis

CurrentFac2: Perceptions of current supports and basic literacy skills acquisition (9.2% of the variance)

	M	SD	Item Loading
12 Regular education teachers with learning disabled students receive adequate support from special education staff.	3.18	1.27	.503
21 The inclusion of learning disabled students in regular classes usually results in more resources and support for the regular education teachers.	2.71	1.26	.401
33 The learning disabled student attains better reading skills when reading is taught and learned in the regular education classroom.	2.62	.94	-.550
34 The learning disabled student attains better writing skills when writing is taught and learned in the regular education classroom.	2.74	.97	-.563
35 The learning disabled student attains better math skills when math is taught and learned in the regular education classroom.	2.70	1.01	-.527

Appendix F Table 6

Means, Standard Deviations, and Factor Loadings from Factor Analysis

IdealFac1: Perceptions of ideal efficacy and appropriate implementation of inclusion (22% of the variance)

	M	SD	Item Loading
1 The educational needs of students with learning disabilities are met in regular classrooms.	3.67	1.25	.652
2 Regular education teachers have the skills and knowledge to educate students with learning disabilities.	3.74	1.18	.655
7 The inclusion of learning disabled students in regular education classes improves their academic achievement.	3.73	1.04	.698
8 Regular education teachers participate in inservice training to prepare them for teaching students with learning disabilities.	4.35	.77	.493
11 The inclusion of learning disabled students in regular classes generally has an adverse effect on the education of classmates.	2.19	1.12	-.637
12 Regular education teachers with learning disabled students receive adequate support from special education staff.	4.48	.68	.423
13 Students with learning disabilities who are included in regular education classes are more likely to graduate from high school.	3.70	.98	.561
19 Learning disabled students make adequate academic progress in regular education classes.	3.76	.99	.652
24 Students without disabilities benefit from the inclusion of learning disabled students in regular education classes.	3.78	1.01	.717
25 With training, most regular educators can provide appropriate instruction for learning disabled students in regular education classes.	3.70	1.14	.637
27 The academic needs of learning disabled students are met in separate resource settings, taught by special education staff.	3.44	1.18	-.527
28 Having regular and special educators team or co-teach the regular class meets the needs of all students in the regular education class.	3.85	1.08	.613

Appendix F Table 6

Means, Standard Deviations, and Factor Loadings from Factor Analysis

29 Having special education staff work with learning disabled students in regular education classes is disruptive to the learning of students without disabilities.	2.20	1.15	-.537
31 Learning disabled students make more progress when they receive academic instruction in a resource/special education setting.	3.34	1.12	-.617
33 The learning disabled student attains better reading skills when reading is taught and learned in the regular education classroom.	2.94	1.10	.715
34 The learning disabled student attains better writing skills when writing is taught and learned in the regular education classroom.	2.99	1.12	.738
35 The learning disabled student attains better math skills when math is taught and learned in the regular education classroom.	2.99	1.10	.726

Appendix F Table 6

Means, Standard Deviations, and Factor Loadings from Factor Analysis

IdealFac2: Perceptions of ideal supports for and influence in placement decisions (8.5% of the variance)

	M	SD	Item Loading
3 A student with a learning disability is weighted as more than a single student for purposes of determining class size.	4.02	1.03	.492
6 Regular and special education teachers have regular time within the school day to collaborate on the education of the student with a learning disability.	4.39	.90	.434
9 Regular education teachers who successfully teach learning disabled students receive recognition or compensation.	3.65	1.23	.445
18 The principal regularly checks on the need for support for the education of learning disabled students in regular education classes.	4.20	.72	.467
20 Special education teachers have specialized knowledge and skills they use in educating learning disabled students.	4.56	.63	.412
21 The inclusion of learning disabled students in regular classes usually results in more resources and support for the regular education teachers.	4.21	.85	.584
26 The regular education teacher exerts influence in the decision to include a learning disabled student in his/her class.	3.93	.91	.512
27 The academic needs of learning disabled students are met in separate resource settings taught by special education staff.	3.44	1.18	.434
32 Special and regular educators have more influence than other IEP members on the inclusion of the learning disabled student in the regular education classroom.	3.49	1.05	.405

Appendix G Table 7
ANOVA Identified Statistically Significant Differences in Perceptions in Factor Scores

Factors	Variable	Means	p	Effect Size
CurrentFactor1 current effectiveness and appropriate implementation	Years in regular education	1 to 8 (.261) > 20 to 54 (-.169), 9 to 19 (-.278)	.002	.48
	Endorsement	Special Ed (.707) > Dual (.466)	.000	.24
	Assignment	Princ (.748), Sped (.632) > Spec (-.326), Primary (-.218), Inter (-.200)	.000	.94
CurrentFactor2 current supports and basic literacy	Assignment	Princ (.658) > Primary (-.252), Inter (-.215)	.001	.89
	Education	EdS (1.08) > MS +30 (-.211), BS (-.035), MS (.022)	.014	1.15
IdealFactor1 ideal effectiveness and appropriate implementation	Years in regular education	1 to 8 yrs (.214) > 20 to 54 yrs (-.292)	.011	.51
	Endorsement	Sped (.806), Dual (.305) > Regular Ed (-.175)	.002	.73
	Assignment	Sped (.501), Principal (.318) > Specials (-.371)	.001	.78

Princ = Principal; Sped = Special Education Teacher; Primary = Primary Classroom Teacher; Intermediate = Intermediate Classroom Teacher; Specials = Art, PE, etc. teacher; ☐▶ = significantly differs from ☐

INCLUSION PERCEPTIONS SURVEY
Nebraska Public School Educators

Dear Educator,

You can provide vital information on the perceptions kindergarten through grade 6 teachers and administrators have about the process and outcomes of the inclusion of learning disabled students in regular education classrooms.

I have selected 500 regular and special education teachers and principals in public schools in Nebraska to survey on their views about the inclusion of learning disabled students in regular education classrooms, how it operates in their buildings and how they think it should operate ideally. Your input is important to this study, a doctoral dissertation on Administrator and Teacher Perceptions of the Inclusion of Students with Learning Disabilities in Regular Education Classrooms in Nebraska.

All responses are completely confidential. Your questionnaire has been given an identification number only so that I will know when it has been returned. Neither your name nor district identification will be used in any step of this research project.

If you want a summary of the results of the study, indicate by writing, "Results of study requested." on the back of the return envelope, and printing your name and address below it. Please do not write this information on the questionnaire.

If you have any questions about the survey or the study, please contact me by telephone (402/554-3354), fax (402/554-3572), or e-mail (kwanzenr@unomaha.ed.us). Please **return** your completed questionnaire in the enclosed envelope **within two (2) weeks**. Thank you for your participation.

Sincerely,
Kelly Wanzenried
Kayser Hall 115
University of Nebraska at Omaha
60 & Dodge Streets
Omaha, Nebraska 68182

INSTRUCTIONS

This questionnaire investigates **current** and **ideal practices** relating to the inclusion of students with learning disabilities in regular education classroom settings. **The statements refer only to students with specific learning disabilities (SLD)**, which, for the purposes of this study, shall mean a student verified as having a learning disability--a significant discrepancy between ability and achievement in understanding or using language--reading, writing, listening, speaking, thinking, and reasoning--and/or performing math calculations and mathematical reasoning.

Nebraska definition: (1) The student fails to achieve commensurate with his/her age and ability when provided with appropriate educational experience; and (2) The student demonstrates a severe discrepancy between achievement and intellectual ability in one or more of the basic

processes involved in understanding or using language, spoken or written, manifested in problems in listening, thinking, speaking, reading, writing, spelling, and/or doing mathematical calculations.

Indicate the response which most closely reflects your agreement or disagreement with each of the statements in terms of:

(1) Current--how it is in your building now--the practices in the school in which you currently work with regard to the inclusion of students with learning disabilities in regular education classes

and

(2) Ideal--how it should be--your concept of the ideal educational setting, the practices and beliefs with regard to the inclusion of students with learning disabilities in regular education classes which you view as ideal.

There are no right or wrong answers to the survey statements. Please read each statement carefully and **circle the letter abbreviation which corresponds to your response.**

RESPONSE KEY

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
SD	D	U	A	SA

SD=STRONGLY DISAGREE D=DISAGREE U=UNDECIDED A=AGREE SA=STRONGLY AGREE

HOW IT IS IN MY BUILDING	STATEMENTS	HOW IT SHOULD BE--THE IDEAL
1. SD D U A SA	1. The educational needs of students with learning disabilities are met in regular classrooms.	1. SD D U A SA
2. SD D U A SA	2. Regular education teachers have the skills and knowledge to teach students with learning disabilities.	2. SD D U A SA
3. SD D U A SA	3. A student with a learning disability is weighted as more than a single student for purposes of determining class size.	3. SD D U A SA
4. SD D U A SA	4. The special education teacher determines how much the student with a learning disability is included in the regular education classroom.	4. SD D U A SA
5. SD D U A SA	5. The inclusion of a learning disabled student in the regular education class requires significant changes in instruction.	5. SD D U A SA
6. SD D U A SA	6. Regular and special eduction teachers have regular time within the school day to collaborate on the eduction of the student with a learning disability.	6. SD D U A SA
7. SD D U A SA	7. The inclusion of learning disabled students in regular education classes improves their academic achievement.	7. SD D U A SA
8. SD D U A SA	8. Regular education teachers participate in inservice training to prepare them for teaching students with learning disabilities.	8. SD D U A SA
9. SD D U A SA	9. Regular education teachers who successfully teach learning disabled students receive recognition or compensation.	9. SD D U A SA
10.SD D U A SA	10. The inclusion of learning disabled students in regular education classes is being promoted mainly to reduce special education costs.	10. SD D U A SA
11.SD D U A SA	11. The inclusion of learning disabled students in regular education classes generally has an adverse effect on the education of classmates.	11. SD D U A SA
12.SD D U A SA	12. Regular education teachers with learning	12. SD D U A SA

	disabled students receive adequate support from special education staff.	
13.SD D U A SA	13. Students with learning disabilities who are included in regular education classes are more likely to graduate from high school.	13. SD D U A SA
14.SD D U A SA	14. Regular and special education teachers use the same instructional strategies in teaching students with learning disabilities.	14. SD D U A SA
15.SD D U A SA	15. Regular eduction teachers who successfully teach students with learning disabilities are usually assigned more of these students.	15. SD D U A SA
16.SD D U A SA	16. Parents of students with learning disabilities have more influence than professional staff in the placement of their children in regular education classes.	16. SD D U A SA
17.SD D U A SA	17. Students with learning disabilities in regular education classes require extra time and attention from the regular education teacher.	17. SD D U A SA
18. SD D U A SA	18. The principal regularly checks on the need for support for the education of learning disabled students in regular education classrooms.	18. SD D U A SA
19. SD D U A SA	19. Learning disabled students make adequate academic progress in regular education classes.	19. SD D U A SA
20. SD D U A SA	20. Special education teachers have specialized knowledge and skills they use in educating learning disabled students.	20. SD D U A SA
21. SD D U A SA	21. The inclusion of learning disabled students in regular classes usually results in more resources and support for the regular education teachers.	21. SD D U A SA
22. SD D U A SA	22. The principal has influence in the decision to include learning disabled students in regular education classes.	22. SD D U A SA
23. SD D U A SA	23. The inclusion of learning disabled students in regular education classes requires instruction and classroom management changes.	23. SD D U A SA
24. SD D U A SA	24. Students without disabilities benefit from the inclusion of learning disabled students in regular education classes.	24. SD D U A SA

25. SD D U A SA	25. With training, most regular educators can provide appropriate instruction for learning disabled students in regular education classes.	25. SD D U A SA
26. SD D U A SA	26. The regular education teacher exerts influence in the decision to include a learning disabled student in his/her class.	26. SD D U A SA
27. SD D U A SA	27. The academic needs of learning disabled students are met in separate resource settings, taught by special education staff.	27. SD D U A SA
28. SD D U A SA	28. Having regular and special educators team or co-teach the regular class meets the needs of all students in the regular education class.	28. SD D U A SA
29. SD D U A SA	29. Having special education staff work with learning disabled students in regular education classes is disruptive to the learning of students without disabilities.	29. SD D U A SA
30. SD D U A SA	30. The building Student/Teacher Assistance Team provides support to regular educators in making accommodations to meet the academic needs of learning disabled students in regular classes.	30. SD D U A SA
31. SD D U A SA	31. Learning disabled students make more progress when they receive academic instruction in a resource/special education setting.	31. SD D U A SA
32. SD D U A SA	32. Special and regular educators have more influence than other IEP members on the inclusion of the learning disabled student in the regular education classroom.	32. SD D U A SA
33. SD D U A SA	33. The learning disabled student attains better reading skills when reading is taught and learned in the regular education classroom.	33. SD D U A SA
34. SD D U A SA	34. The learning disabled student attains better writing skills when writing is taught and learned in the regular education classroom.	34. SD D U A SA
35. SD D U A SA	35. The learning disabled student attains better math skills when math is taught and learned in the regular education classroom.	35. SD D U A SA

PLEASE PROVIDE THE FOLLOWING INFORMATION

36. Your gender
- O Female
- O Male

37. Your ethnicity/race
- O African American/Black
- O American Indian or Alaskan Native
- O Asian or Pacific Islander
- O Caucasian/White
- O Hispanic/Latino

38. Your highest educational degree
- O B.S./B.A.
- O M.S./M.A.
- O M.S./M.A. + 30 hours
- O EdS
- O EdD/PhD

39. Your school district setting
- O Rural
- O Small Town
- O Suburban
- O Urban
- O Central City

40. Have you taught students with learning disabilities?
- O Yes
- O No

41. If the answer to question #40 is Yes, in what setting?
- O Regular education classroom
- O Special education/resource setting

42. Teaching /administrative assignment_____

43. Teaching/administrative endorsement(s)_____

44. Years of teaching in regular education_____in special education_____

45. Years of administrative experience_____

46. Please estimate the number of students in your school district_____

47. Please estimate the number of students in your building_____

48. Please estimate the number of special education students in your building_____

49. It would be an advantage if I had the name of your school district

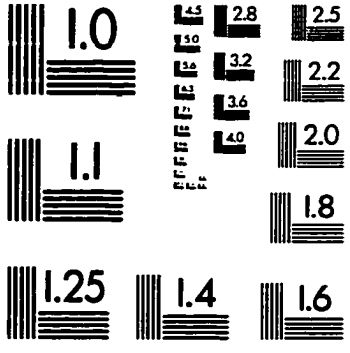
_____

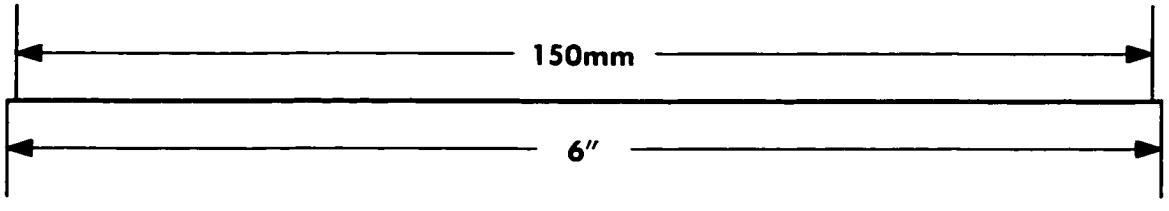
(optional school district name)

Thank you for taking your time to complete this questionnaire.
Please place the questionnaire in the enclosed self-addressed, stamped envelope and mail it to me.

Indicate on the envelope if you want a copy of the survey results.

IMAGE EVALUATION TEST TARGET (QA-3)





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